ARCHAEOLOGICAL SURVEY OF THE PROPOSED RAINEY PLANT SITE-GREENWOOD COUNTY SW SUBSTATION 230KV TRANSMISSION LINE, ANDERSON, ABBEVILLE, AND GREENWOOD COUNTIES, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive archaeological survey of a thirty mile long transmission line corridor for Sabine and Waters, Inc. The project corridor runs through Anderson, Abbeville and Greenwood Counties, South Carolina. The corridor began at the proposed site for the Rainey Plant in Anderson County, and ended at the Greenwood County SW substation in Greenwood County.

The project corridor includes a wide range of woodlands, cultivated and fallow fields, pastures, and wetlands. Much of the corridor is highly eroded with subsoil visible at the ground surface. At the time of the survey, only those parts of the corridor that crossed roads were staked. However, half of the corridor ran alongside an existing electrical transmission line corridor.

The archaeological survey consisted of a shovel test survey, with a single line of tests excavated in the center of the corridor at 100-foot intervals. Shovel tests were not excavated in areas of standing water, in areas of extensive disturbance, or in areas with more than 75% ground visibility. These areas were walked and subjected to a pedestrian survey.

Prior to this study no archaeological sites had been identified in the immediate project area. In addition, no National Register properties were identified in the immediate project area. As a result of this study, fourteen archaeological sites, and two architectural sites were located. One of these sites, 38AB827, is recommended as potentially eligible for the National Register of Historic Places. The other sites are not recommended as eligible for inclusion.

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INTRODUCTION

This intensive survey of the proposed Santee Cooper Electric Power 230 kv transmission line in Anderson, Abbeville, and Greenwood Counties was conducted by Rachel Campo of Chicora Foundation, Inc. for Mr. Ken Smoak of Sabine and Waters, Inc. The project corridor begins in the southwestern portion of Anderson County, and continues through the northern portion of Abbeville County, ending in the northern portion of Greenwood County (Figure 1). The corridor for the transmission line is estimated to be about 85 to 100 feet in width and for half of its length it will follow an existing electrical transmission line corridor.

The survey corridor begins at the proposed Rainey Plant site, off of S-4-709 (Opry House Road) in Anderson County. The line runs east, and turns northeast after 7,500 feet. The line crosses SC State Highway 187 and turns east again 4,500 feet after crossing SC Highway 187. The corridor continues east for a total of 2.7 miles, crossing SC Highway 181, Brooks McGee Road, LBJ Road, Gentry Road, and SC Highway 81. After crossing Wilson Creek, the corridor turns to the southeast for 1.5 miles, crossing Charles Beatty Road and Sexton Gin Road. At S-4-668 (Sam Lyum Road) the corridor turns to the north for 2,500 feet, crossing Hebron Church Road. After crossing Jordan Creek, the line turns in a more northerly direction for 1,500 feet, and again turns in an easterly direction. The corridor continues in this direction for 3.5 miles and crosses Flat Rock Road, a finger of Governor's Creek, SC Highway 128, Rocky River and Hen Coop Creek. The corridor turns to the northeast 800 feet west of s-4-107 and continues for 2.1 miles, crossing Bear Creek, S-4-201, Assaville School Road and a finger of Bear Creek. After this finger, the line turns in a more northern direction for 2,000 feet. At S-4-41 (Level Land Road), the corridor turns to the east for 1,00 feet, and then turns southeast, paralleling the existing Duke power line right before crossing SC Highway 284. The corridor parallels the existing power line unit it reaches the end of the line at the Greenwood County SW substation. The corridor continues in this southeasterly direction for 1.2 miles, when the corridor crosses into Abbeville County, and proceeds in this direction for an additional 10.6 miles, crossing a number of creeks and Little River four times, in addition to roads S-1-24, S-1-37, Murdock Road, and Hogskin Creek before crossing SC Highway 184. After crossing Chickasaw Creek, the line turns in a southeasterly direction The corridor continues in this direction for almost three miles, crossing S-1-39, Park Creek, S-1-44,and SC Highway 20/185. The line turns in an easterly direction 3,700 feet after crossing SC Highway 20/185 and continues in this direction for 3.4 miles until the corridor ends at the Greenwood County SW substation. In this last segment, the corridor crosses S-1-184, Grays Creek, and S-1-74. The line crosses into Greenwood County at Long Cane Creek, ending just east of Dud Road.(Figure 2-6).

The corridor consists of a variety of landforms and vegetation including wetlands, pasture, agricultural fields, cleared areas, planted pine, a cane break, and mixed pine/hardwood forests. Many sizeable streams, a river, and a number of small intermittent streams intersect the corridor. The corridor, 85-100 feet wide throughout as previously mentioned, is intended to be used as a power line right of way. Landscape alteration, primarily clearing and grubbing and subsequent operation of equipment to place the poles, will cause considerable damage to the ground surface and any archaeological resources which may be present in the survey area.

We were requested by Mr. Ken Smoak of Sabine and Waters, Inc. to submit a cost proposal for an intensive survey of the project corridor on April 22, 1999. This proposal, submitted on April 23, 1999, was approved on April 29, 1999. These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology

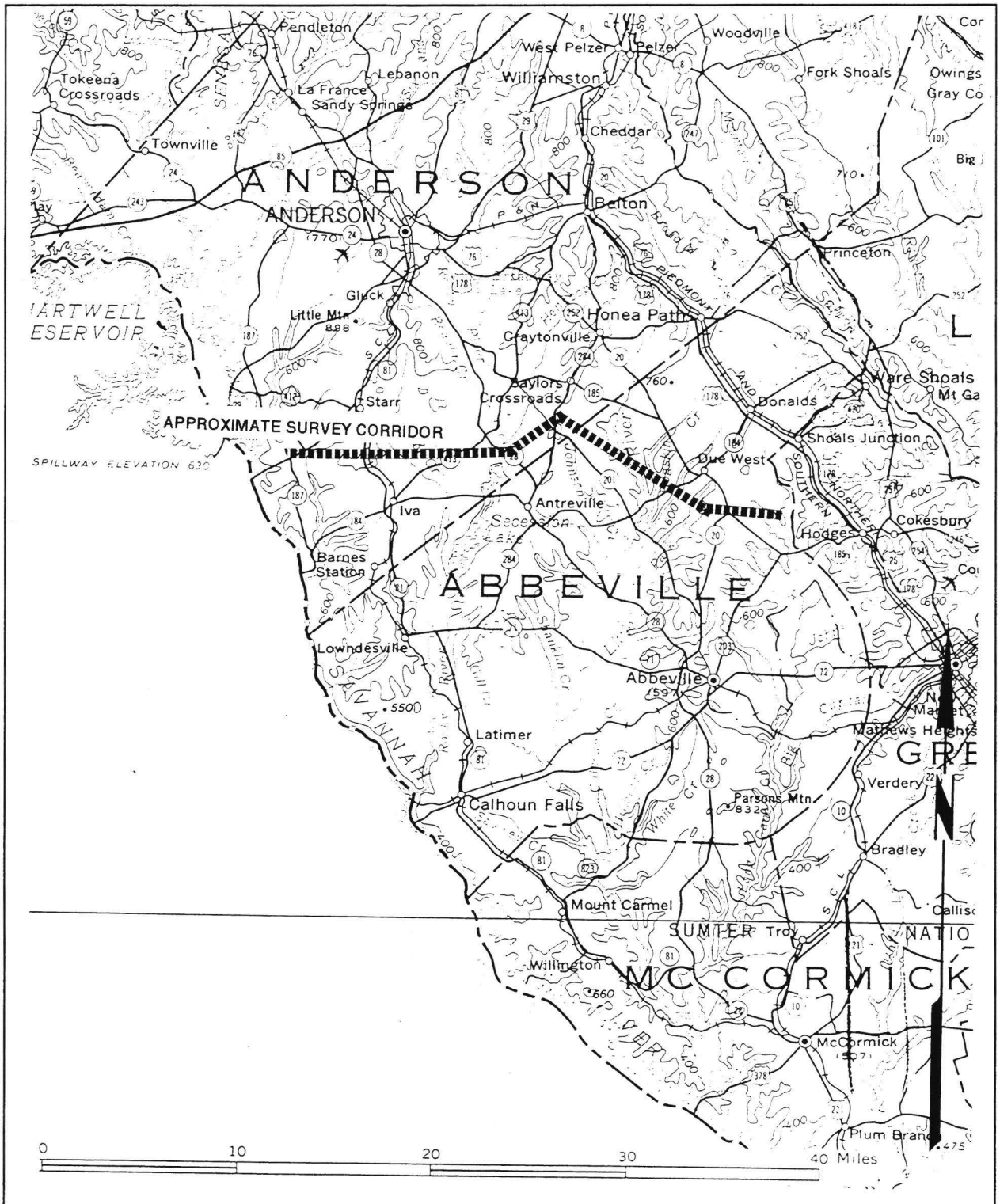

Figure 1. Location of project corridor in Anderson, Abbeville, and Greenwood Counties, South Carolina (base map is USGS South Carolina 1:50,000).

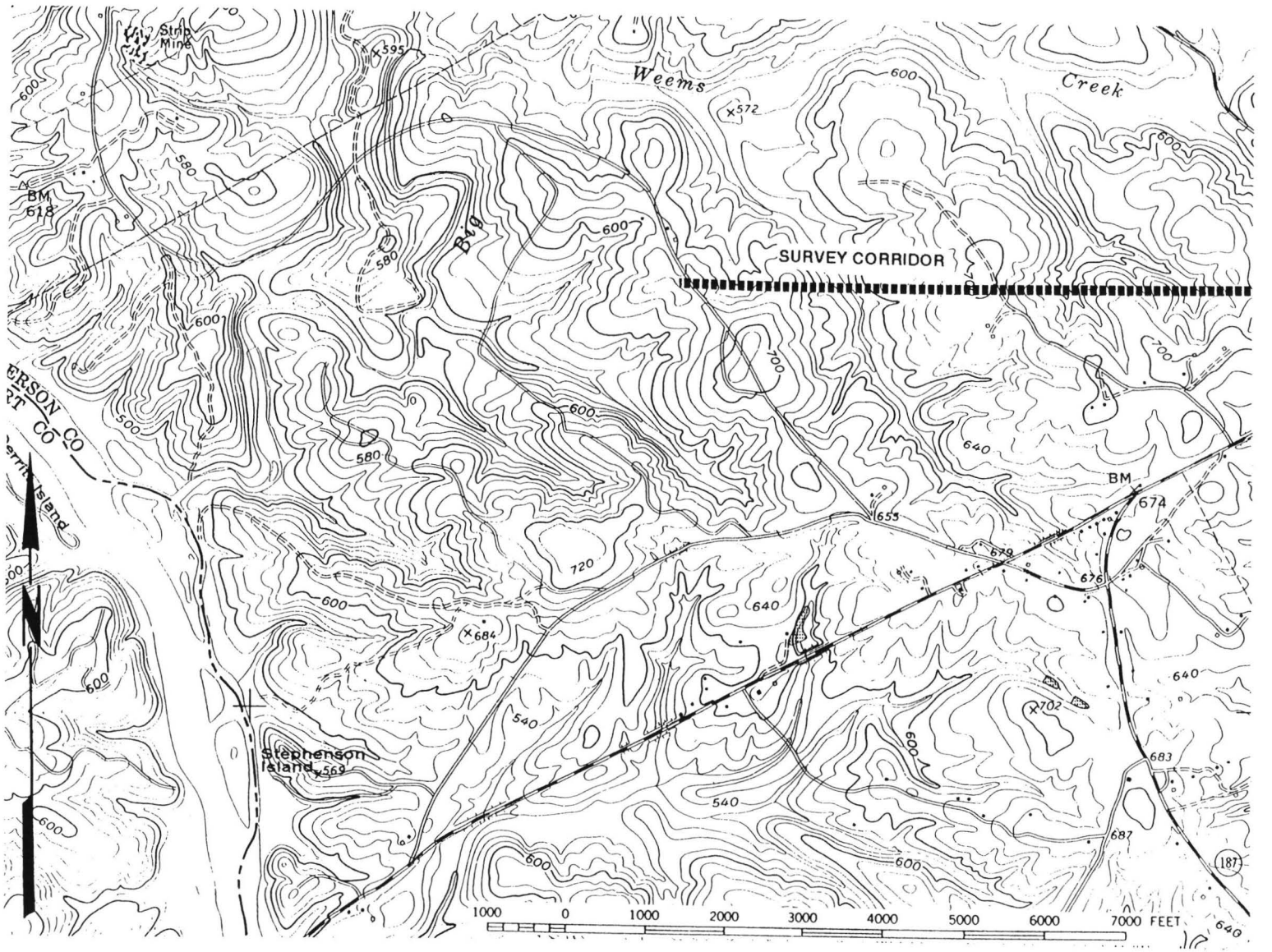

Figure 2. Beginning of survey corridor in Anderson County (base map is USGS topographic map Hartwell Dam 1959PR85).

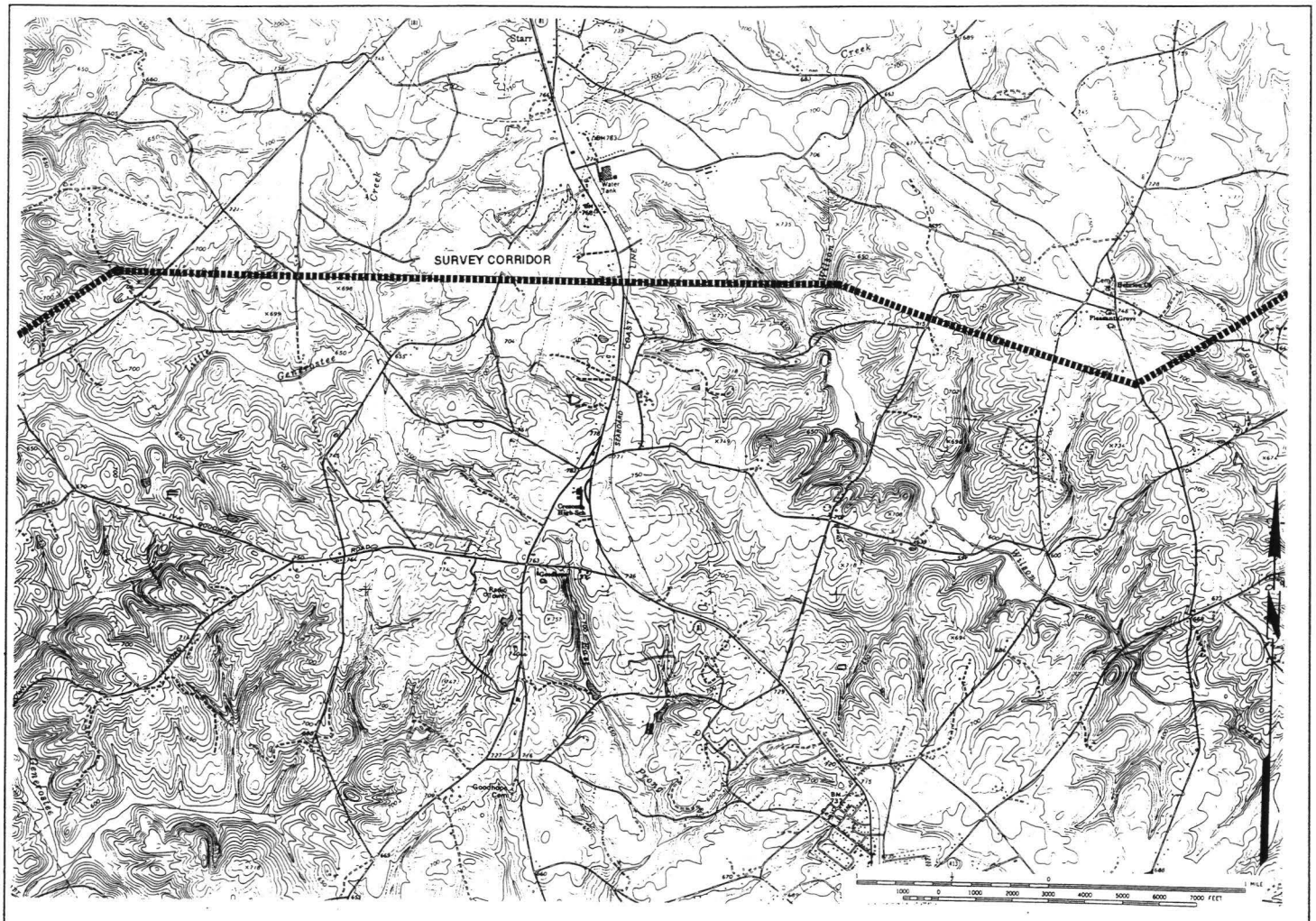

Figure 3. Project corridor in Anderson County (base map is Iva 1964PR79).

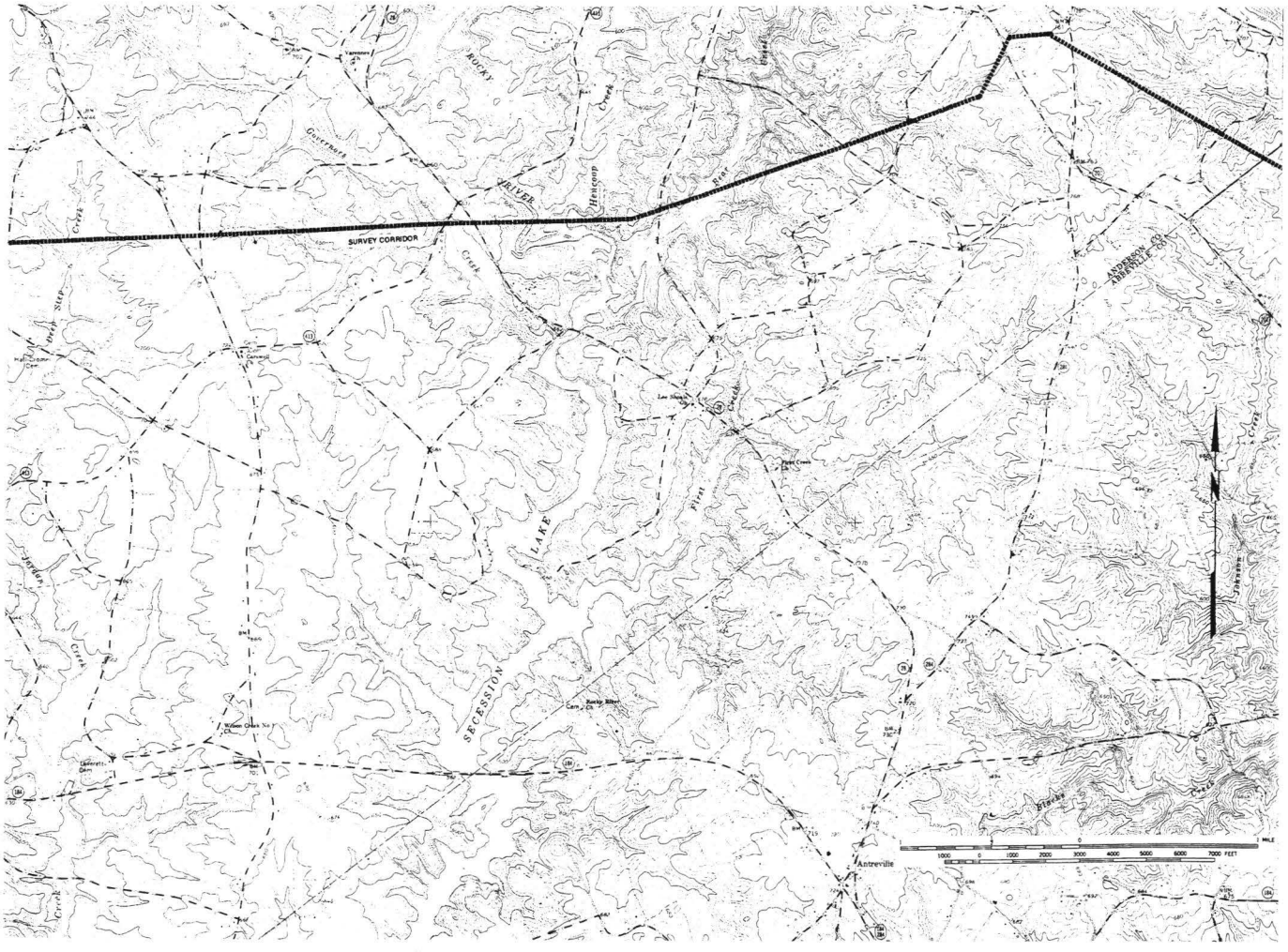

Figure 4. Project corridor in Anderson County (base map is Antreville 1964).

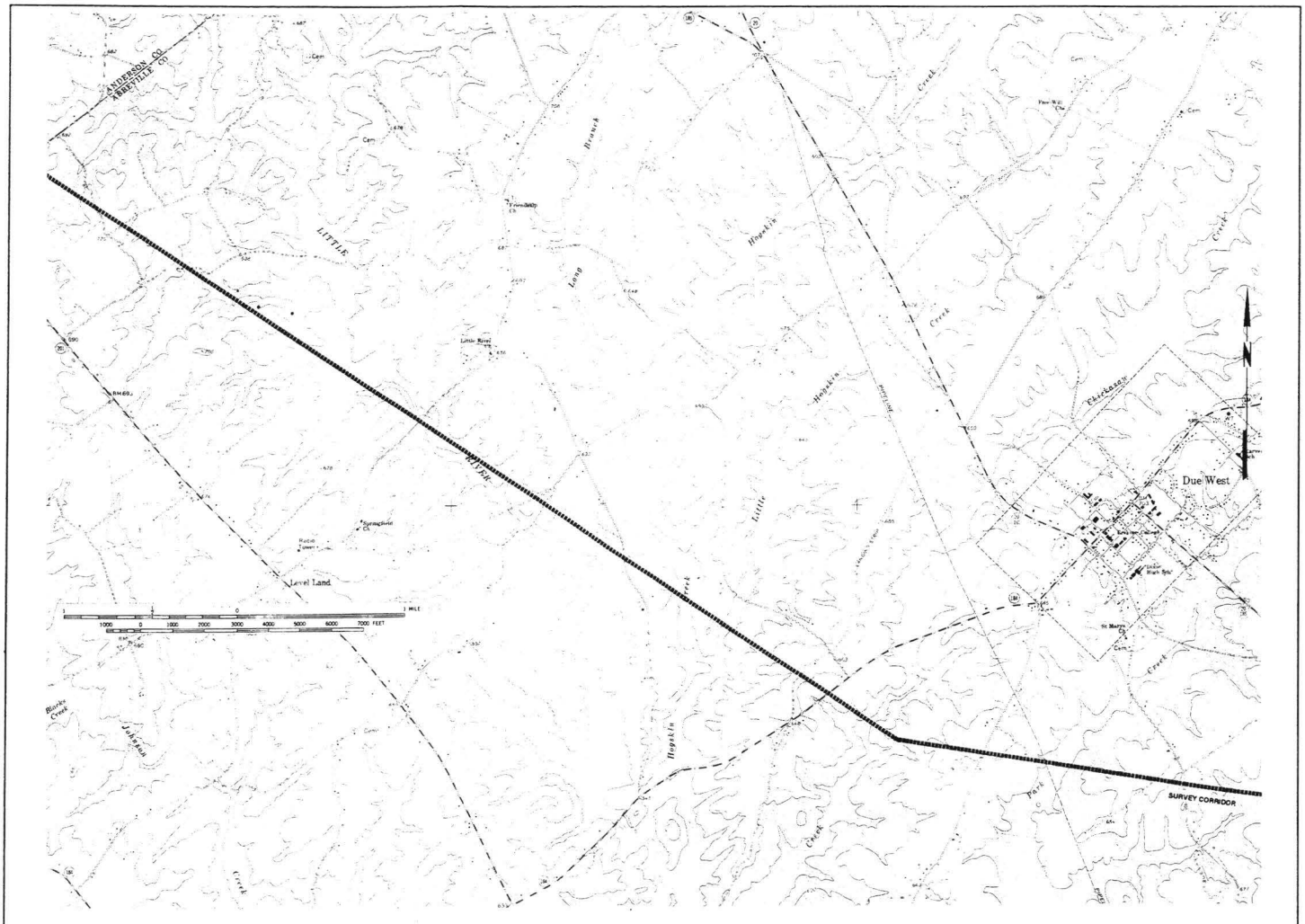

Figure 5. Project corridor in Anderson and Abbeville Counties (base map is Due West 1971).

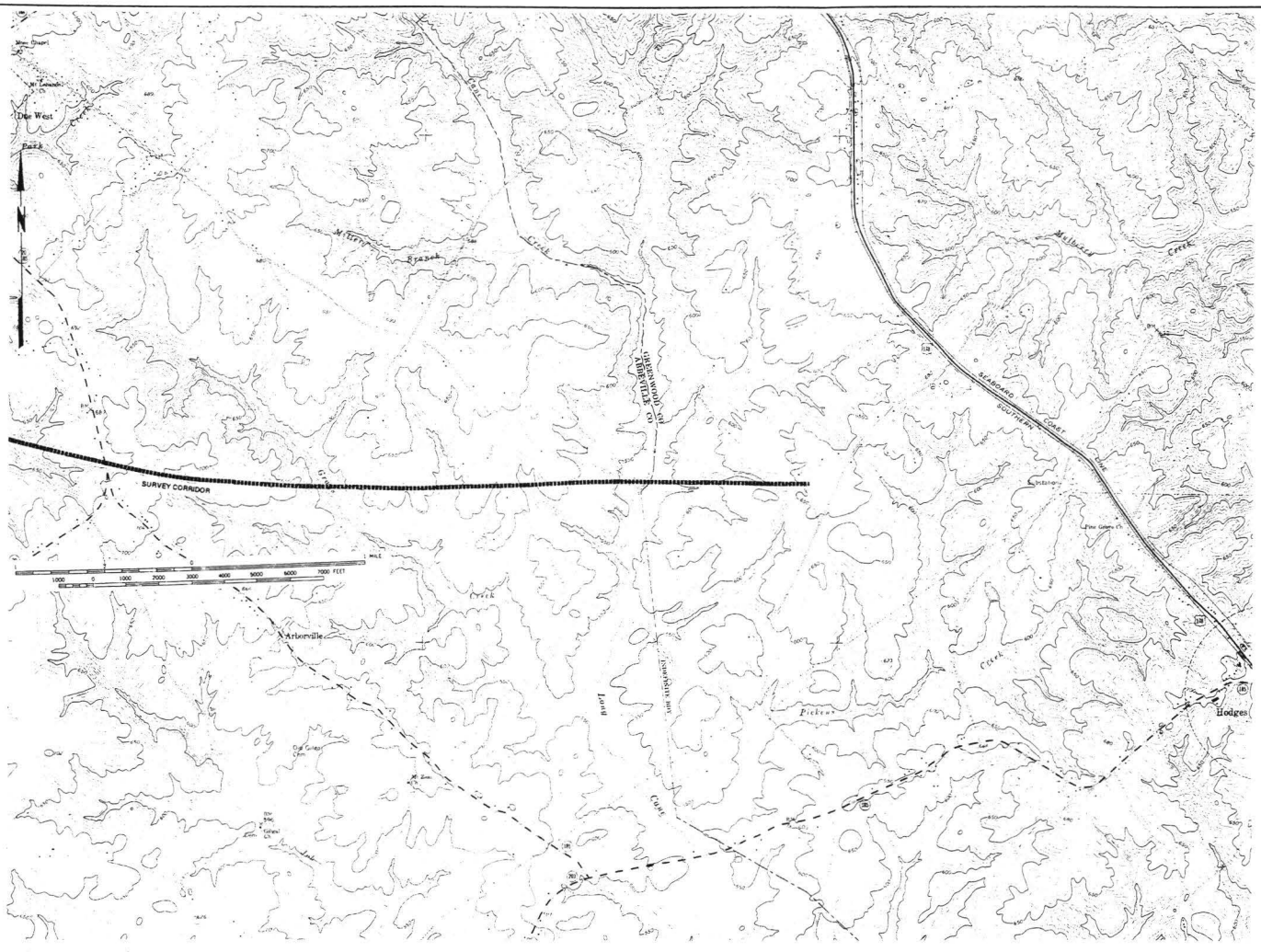

Figure 6. Project corridor in Greenwood County (base map is Shoals Junction 1971).

recorded in the immediate project area. In addition, the master topographic maps at the South Carolina Department of Archives and History were checked on June 8, 1999 to locate any NRHP buildings, districts, structures, sites, or objects, or structures surveys in the study area. There were no NRHP properties or structures surveys recorded for the project area. Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The survey, which was designed to identify prehistoric or historic resources which may be within the project corridor was conducted May 24-28,1999 by Dr. Michael Trinkley and Ms. Rachel Campo. Laboratory and report production were conducted at Chicora's laboratories in Columbia, South Carolina on June 1 through June 12, 1999.

NATURAL ENVIRONMENT

Physiographic Province

The project corridor is situated in the southwestern portion of Anderson County, and continues through the northern portion of Abbeville County, ending in the northern portion of Greenwood County. The corridor falls on ridge tops, ridge side slopes, agricultural fields, fallow fields, pasture, cane breaks, and wetlands (Figures 7 and 8). It also crossed several drainages, including Wilson Creek, Governor's Creek, Bear Creek, Rocky River, and Little River.

Anderson, Abbeville and Greenwood Counties are situated in the western piedmont of South Carolina. Anderson County is in the northwestern part of South Carolina and is bounded to the north by Oconee and Pickens counties and to the south by Abbeville County. The eastern border, shared with Greenville County, follows the Saluda River, while the western boundary with Georgia is defined by the Savannah River, part of which has been flooded to create Hartwell Reservoir. Like Anderson County, Abbeville County is bounded to the west by the Savannah River. To the east, the county is bounded by Laurens County, and to the south and the southeast by McCormick County and Greenwood County. Greenwood county is bounded to the north by Laurens County, to the east by Newberry and Saluda counties, and to the south by Edgefield and McCormick counties, and to the west by Abbeville County.

A 1944 congressional act authorized hydro-electric projects on the Savannah River and the Hartwell Reservoir, covering 23,633 acres, was the second Army Corps project, completed in 1963 (Kovacik and Winberry 1987:201). Like the Clark Hill

Figure 7. View of pasture typical of the project corridor.

Figure 8. View of mixed hardwood area typical to the survey corridor.

project, it was completed with relatively little controversy (and virtually no archaeological research). The last of the three projects contemplated by Congress in 1944 was the Richard B. Russell Reservoir (originally the Trotter Shoals project). This reservoir was not completed until 1983 and faced a hailstorm of public and environmental opposition.

Physiographically, the area is a thoroughly dissected plain. The relief ranges from nearly level to steep, but it is dominantly gently sloping to moderately steep (Herren 1979:1). Although throughout the piedmont area the elevations range from 450 feet above mean sea level (AMSL) to 1,014 feet AMSL, the elevations in the project area range from about 650 to 800 feet. In general these elevations vary as the corridor crosses drainages, although much of the right-of-way will fall on side slopes.

The drainages form a dendritic pattern and throughout the Piedmont this terrain has been extensively dissected and degraded. The Savannah River and its tributaries, such as Big and Little Generostee creeks drain the western third of the county, while the Saluda River and its tributaries, such as Big Creek and Broad Mouth Creek drain the eastern third. The central portion of the county drains south into Rocky River. Richland Creek and several smaller drainages in the project area flow primarily westward, toward the Savannah.

Geology and Soils

Most of the rocks of the Piedmont are gneiss and schist, with some marble and quartzite (Hasselton 1974). Some less intensively metamorphosed rocks, such as slate, occur along the eastern part of the province from southern Virginia into Georgia. This area, called the Slate Belt, is characterized by slightly lower ground with wider river valleys. Consequently, the Slate Belt has been favored for reservoir sites (Johnson 1970), as well as prehistoric occupation (see Coe 1964). The project area is just above the Slate Belt, in an area characterized by highly metamorphosed gneisses, schists, and amphibolites (Murphy 1995:47). The bulk of the soils are formed in materials weathered

from the underlying bedrock of granite, schist, or gneiss.

The project area is primarily situated on Cecil sandy loams, with slopes ranging from 2% to 10%, although other soil series include the Cecil clay loams, 6-10% slopes, eroded; Pacolet sandy loams, 15-25% slopes; Cataula sandy loams, 6-10% slopes; and, in the drainages, Toccoa-Cartecay complex (Herren 1979: Map 45).

The Cecil soils, where an A horizon is present, exhibit about 0.5 foot of brown (10YR4/3) sandy loam over a B horizon of red (2.5YR4/6) clay. The Cataula soils have a similar A horizon, although the B horizon is characterized by a brown (7.5YR5/4) clay loam and the Pacolet soils have a yellowish-brown (10YR5/4) sandy clay loam A horizon over a red (2.5YR4/6) clay B horizon.

The 1973 aerial photographs reveal that much of the proposed corridor has been under pasture for a number of years. This is likely because many of the soils, as evidenced during the shovel testing, revealed very thin A horizons — likely developed over the past 50 years of conservation farming. In numerous locations there was abundant gravel within the upper 0.4 foot of the soil, indicating that the A horizon had been completely eroded, with the erosion extending into the underlying B horizon.

In fact, the 1934 South Carolina Erosion Survey by M.W. Lowry found that this portion of the piedmont exhibited severe sheet erosion with occasional gullies (Lowry 1934). This portion of the state has lost up to 1.1 foot of soil through erosion in the nineteenth and early twentieth centuries (Trimble 1974:3). It is part of the area classified by Trimble as having high antebellum erosion land use with postbellum continuation and belonging to his Region III — the Cotton Plantation Area (Trimble 1974:15).

Within recent times, many areas on the project corridor have been logged, likely increasing soil loss originating during earlier agricultural activities. The United States Forest Service has determined that logging accounts for upwards of 0.36 tons of soil erosion per acre per year in this region, while areas of skid trails have erosion rates of about 9.91 tons per acre per year (U.S. Department of Agriculture 1980:25). This is clearly evidenced by the shovel tests conducted in the project area.

In 1826 Robert Mills remarked that the soils of the Pendleton District (of which Anderson comprised the southern half) were primarily "red clay, susceptible of great and lasting improvements" (Mills 1826:673). In addition, he was already sounding an alarm, commenting that:

> The deteriorating effects consequent upon the planting system, observable in other districts, should prove a lesson to this, to avoid falling into the same error. The woods will disappear fast enough, without clearing more land than can be cultivated to advantage; and, in a hilly country like Pendleton, particular care should be taken, when the lands are left in fallow, to keep them enclosed; and to given them a vegetable coat, to guard the surface from being washed away. It is deplorable to see the neglect of many of our planters in different districts, in this respect; and the consequent destruction of some of the finest farming lands (Mills 1826:683-684).

Fairfield planter William Ellison remarked in 1828 that "the successful cotton planter sits down in the choicest of his lands, slaughters the forest, and murders the soil" (quoted in Ford 1988:38). In 1842 agricultural reformer Edmund Ruffin warned of impending disaster from the reliance on cotton and observed that little effort was being made to protect the land (Ruffin 1843:73).

In spite of these early warnings, the South Carolina Department of Agriculture, Commerce, and Immigration, as late as 1907, found no reason to remark on the threat of erosion, noting only that "the

second best cotton lands are found in Anderson and Laurens Counties" (State Department of Agriculture, Commerce, and Immigration 1907:255).

As Barry has noted:

> [m]any years ago virgin areas of the Piedmont Province were highly fertile and highly productive, as demonstrated by the high degree of agricultural productivity over the past 150 years. However, mismanagement, over-cropping, erosion, and a multitude of other factors have reduced the once fertile lands to eroded ridges that require high applications of fertilizers to remain productive (Barry 1980:57).

Climate

Elevation, latitude, and distance from the coast work together to affect the climate of South Carolina, including the Piedmont. In addition, the more westerly mountains block or moderate many of the cold air masses that flow across the state from west to east. Even the very cold air masses which cross the mountains are warmed somewhat by compression before they descend on the Piedmont.

Consequently, the climate in this area is temperate. The winters are relatively mild and the summers warm and humid. Rainfall in the amount of about 46 to 47.5 inches is adequate. In general, about 23 inches of rain occur during the growing season, with periods of drought not uncommon during the summer months. As Hilliard illustrates, these droughts tended to be localized and tended to occur several years in a row, increasing the hardship on those attempting to recover from the previous year's crop failure (Hilliard 1984:16). Perhaps the best wide-scale example of this was the drought of 1845, which caused a series of very serious grain and food shortages throughout the state.

The average growing season is about 217 days,

Figure 9. View of planted pines in the survey corridor.

Figure 10. View of hardwood stand in survey corridor.

Figure 11. View of cane break in survey corridor.

although early freezes in the fall and late frosts in the spring can reduce this period by as much as 10 or more days (Herren 1979: Table 3). Consequently, most cotton planting, for example, did not take place until middle May, avoiding the possibility that a late frost would damage the young seedlings.

Floristics

Piedmont forests generally belong to the Oak-Hickory Formation as established by Braun (1950). The potential natural vegetation of the area is the Oak-Hickory-Pine forest, composes of medium tall to tall forests of broadleaf deciduous and needleleaf evergreen trees (Küchler 1964). The major components of this ecosystem include hickory, shortleaf pine, loblolly pine, white oak, and post oak. In actuality, the Piedmont is composed of a patchwork of open fields, pine woodlots, hardwood stands, mixed stands, and second growth fields. Shelford (1963) includes the Carolina Piedmont in the Oak-Hickory zone of the Southern Temperate Deciduous Forest Biome.

Today the "patchwork" is more than ever clearly visible. The survey corridor includes a few areas of planted pines (Figure 9), hardwood stands (Figure 10), mixed stands, cane breaks (Figure 11), and grassed pastures (Figure 12).

Figure 12. View of grassed pastures in survey corridor.

PREHISTORIC AND HISTORIC OVERVIEW

Previous Research

The Piedmont has been the focus of considerable archaeological research. Derting et al. (1991), for example, cite 89 studies specific to Anderson County, 100 to Abbeville County, and 73 to Greenwood County. Virtually all of these are compliance related.

There is no single synthesis of the area's archaeology. Perhaps the most thorough overview specific to the Anderson County area is the survey of the Laurens-Anderson highway connector (Goodyear et al. 1979). In this study, the bulk of the prehistoric sites were low density Archaic Period lithic scatters found in the uplands along the larger streams. This provides a basic model for site location.

The bulk of archaeological research in Greenwood County consists of surveys in Sumter National Forest or S.C. Department of Highways and Public Transportation surveys which are too numerous to individually list (see Derting et al. 1991). Rodeffer and Holschlag (1979) published a reconnaissance level survey report for the county of Greenwood reporting on 358 archaeological sites. Of these, 295 contained prehistoric components, while 167 contained historic components.

In Abbeville County, most of the archaeological research has been conducted in the Sumter National Forest, for the U. S. Forest Service, and the Richard B. Russell Dam and Lake at Savannah River (Derting et al. 1991).

In addition, the Paleoindian and Early Archaic is carefully explored by a variety of authors in an edited volume by Anderson and Sassaman (1996). These same researchers have also explored the Middle and Late Archaic (Sassaman and Anderson 1994). The Woodland and Mississippian is less well researched for the Piedmont, although Anderson (1994) does provide a generalized overview.

Historic site location is more difficult do gauge given the sparsity of work in the area. The bulk of historical archaeology in the county has been performed at Ninety-Six, associated with the late eighteenth century use of the village of Cambridge and the star fort occupied by the British (see, for example, Baker 1972; Holschlag and Rodeffer 1976a; 1976b; 1977; 1978). Brooks and Crass (1991) have provided synthetic information on research at the nearby Savannah River site. It is likely that their predictive model for site location can be transposed to Greenwood County. They found that the earliest occupations were located on rivers, but as the eighteenth century progressed, creeks were also a focus of settlement. During the nineteenth century settlement became more road oriented.

There are no National Register buildings, districts, structures, sites, or objects in the survey area. In addition, no archaeological sites are recorded at the South Carolina Institute of Archaeology and Anthropology for the immediate vicinity of this study.

Prehistoric Overview

In the Carolina Piedmont, lithic scatters are the most common type of prehistoric site encountered. Goodyear et al. (1979:131-145) found that lithic scatter sites located in the inter-riverine Piedmont were geographically extensive and exhibited little artifact diversity. These sites have been interpreted as:

> limited or specialized activity sites which represent resource exploitation or other distinct functions. Nearly all investigators working in the Piedmont have related these sites to activities involving hunting, nut

> gathering, and procuring of lithic raw materials (Canouts and Goodyear n.d.:8).

Although the vast majority of these sites are located in eroded areas and exhibit little to no subsurface integrity, Canouts and Goodyear (1985) argue that they have analytical value. This value lies in their horizontal rather than vertical dimensions. They argue that:

> [f]uture investigators of upland sites must effect broad-scale spatial analyses comparable to the temporal analyses effected through excavation of deeply stratified sites. Both endeavors are necessary, and neither is sufficient for the total understanding of Piedmont prehistory" (Canouts and Goodyear 1985: 193).

One observation that Canouts and Goodyear (1985) made is that lithic raw material ratios change through time. For instance, at the Gregg Shoals site in Elbert County, Georgia, the Early Archaic assemblage reflects greater use of non-local cryptocrystalline materials and the Late Archaic, greater use of non-quartz local material (see Tippitt and Marquardt 1981). Examination of changing use of lithic resources will help archaeologists better understand issues such as the extent of seasonal rounds, trade networks, and social organization. Clearly, the discussions by Canouts and Goodyear (1985) argue strongly for a higher regard for the "lowly" lithic scatter — a very common occurrence in the Piedmont.

Figure X provides an overview of the cultural sequence commonly found in the Piedmont of South Carolina.

Paleoindian Period

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977). The Paleoindian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989:36-38).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Very little work in the state has been able to focus on Paleoindian settlements because of the rarity of the site type. No evidence was found for Paleoindian occupation in the Laurens-Anderson inter-riverine area, which is not surprising since elsewhere in the state these sites are usually found clustered along major drainages and their tributaries which is interpreted by Michie (1977:124) to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna."

One site identified in the Sumter National Forest (Price 1992), in neighboring Laurens County, is believed to have a possible Paleoindian component (38LU317). It is situated on a ridge saddle adjacent to a spring which feeds into the Enoree River, located only about 0.3 miles to the north. This fits well with previous arguments that Paleoindian sites will be located adjacent to major drainages.

Anderson (1992:32) suggests that the comparatively low density of Paleoindian diagnostics in South Carolina may be because the state could have been on the edge of the ranges of groups centered in other areas. He suggests that permanent settlements elsewhere probably occurred later in the Paleoindian period, only when population levels had grown appreciably in these centers. This would help to explain the overlap in stylistic traditions (such as the Clovis, Suwannee, Simpson, and Dalton) observed in South Carolina which perhaps resulted from populations expanding outward from these centers.

Archaic Period

The Archaic period, which dates from 8000 to as late as 500 B.C. in the Piedmont, does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Archaic period assemblages, characterized by corner-notched, side-notched, and broad stemmed projectile points, are common in the vicinity, although they rarely are found in good, well-preserved contexts (for a thorough discussion of the Early Archaic, see Anderson and Sassaman 1996, while Anderson and Joseph 1988 offer a review of prehistoric archaeology along the upper Savannah River).

Prehistoric sites in the Piedmont inter-riverine zones are for the most part characterized as "upland lithic scatters" (House and Wogaman 1978:xii). These sites are shallow deposits without stratigraphic definition, contain a diversity of artifacts, and are commonly disturbed by plowing and/or erosion (Canouts and Goodyear 1985; Trinkley and Caballero 1983:27).

Early Archaic

During the Laurens-Anderson study (Goodyear et al. 1979), four sites with Early Archaic components were identified. Each of these sites contained a single example of Dalton[1] points or probable Dalton preforms made of indigenous Piedmont quartz. The following Palmer phase was found to be very common in the area and was represented by 28 sites. While most of the specimens were manufactured from the local quartz, some were manufactured from Coastal Plain chert from the Flint River formation located in the lower coastal plain of South Carolina and Georgia. There were also examples of metavolcanic rhyolite from the Carolina Slate Belt and what may be "Ridge and Valley chert" from eastern Tennessee.

At these sites a wide range of tool types were identified including a large number of unifacial and flake tools believed to be associated with the Early Archaic occupation. Goodyear et al. (1979:197) found that while Early Archaic sites with unifaces were found throughout the corridor, sites on ridgetops which were large watershed divides produced higher counts. They believe that the large number of sites producing Palmer points is related to environmental changes at that time. The large diversity in lithic raw material provided information regarding their "mobility patterns and regions of interactions" (Goodyear et al. 1979:198).

Anderson and Hanson's (1988) band/macroband model of Early Archaic settlement was formulated primarily to evaluate data from the Savannah River basin. In the Savannah River Valley, settlement organization of the Early Archaic people was "characterized by the use of a logistically provisioned seasonal base camp or camps during the winter, and a series of short-term foraging camps throughout the remainder of the year" (Anderson 1992:36). During the early spring, the groups are believed to have moved toward the coast, then back into the upper coastal plain and piedmont during the later spring, summer, and early fall. During the winter they returned to their base camp incorporating some side trips to other drainages for aggregation events by groups from two or more different drainages. These aggregation sites are believed to have been located on Fall Line river terraces (Anderson 1989a:36). One example of a postulated base camp is the G.S. Lewis site at the Savannah River Site. This site is located on a ridge adjacent to the confluence of Upper Three Runs Creek and the Savannah River. Given this scenario for the Savannah River basin (which likely applies to other river basins), Early Archaic sites in the Piedmont were likely occupied from summer until fall and don't include aggregation sites. Anderson and Hanson (1988) place the Upper Piedmont in the Saluda/Broad macroband settlement system. At the band level, they proposed "co-residential population aggregates" consisting of 50 to 150 people which occupied and moved primarily within one drainage basin. They projected that individual macroband population was between 500 and 1500 people. They also formulated a spatial model for the distribution of individual bands over the South Atlantic

[1] Some researchers (see, for instance, Anderson 1992) classify Dalton as Paleoindian while others (Goodyear et al. 1989) classify it as Archaic.

Slope.

Anderson (1989b) notes that data from the Savannah River Site and the Richard B. Russell Reservoir "suggest that a decline in utilization of the Coastal Plain may have occurred at the same time as an increase in utilization of the Piedmont [and] may be a part of a trend noted in the terminal Early Archaic in the general region. Settlement patterning in any given area was thus likely shaped by a range of variables, such as local resource structure, as well as by more regional trends in climate, population density, and these patterns apparently changed appreciably over time" (Anderson 1992:39). Data from the Laurens-Anderson study and the Savannah River project suggests that inter-riverine sites will be found on hills between watershed divides and riverine sites will be located on knolls adjacent to a major confluence.

Middle Archaic

Morrow Mountain and Guilford points constituted the primary evidence for Middle Archaic (5000 to 3000 B.C.) occupation in the Laurens-Anderson corridor (Goodyear et al. 1979). Morrow Mountain constituted the vast bulk of these projectile points and were present in both the I and II varieties.[2] Over 95% of the 145 points were manufactured from the local quartz, which parallels other findings in Piedmont South Carolina. Guilford was not nearly as prominent and consisted of 35 finished specimens or preforms, all of which were manufactured from quartz.[3]

The Middle Archaic period was found to consist of the largest number of sites. In terms of geographic distribution, Goodyear et al. (1979) found that the Morrow Mountain phase was much like the Palmer phase, with sites occurring on ridges between watersheds. However, the almost complete reliance on local quartz separates the Morrow Mountain and Guilford phase sharply from the earlier Palmer phase. They suggest that "[t]he large number of Middle Archaic sites well dispersed through the inter-riverine areas and the abundant nature of chipped quartz remains on these sites suggest frequent movement and activity throughout the Piedmont of South Carolina" (Goodyear et al. 1979:207). Data from early reservoir projects (see, for example, Wauchope 1966) as well as inter-riverine observations by Caldwell (1954; 1958) and Coe (1952) made it clear that there were sharp contrasts between riverine and inter-riverine sites in terms of artifact diversity and density, and in the use of shellfish (Sassaman and Anderson 1994:134). With the advent of cultural resource management in the 1970s, additional data was available and further emphasized these differences. All of this data indicated that the largest and densest sites were located along large rivers, and that small, sparse sites were found throughout the uplands. While these differences were clear, what remained unclear was the relationship between riverine and inter-riverine sites in a settlement-subsistence system, and how, if at all, this system changed over time (Sassaman and Anderson 1994:135).

House and Ballenger studied this issue during their survey work on the proposed Interstate 77 project in 1976. They classified riverine zones of containing only the largest rivers while inter-riverine zones consisted of smaller rivers and streams. House and Ballenger (1976) argued that streams with a ranking of 3 or higher[4] contained resources that were not abundant in the uplands (fish, turtle, raccoon, etc.),

[2] Coe (1964) describes Morrow Mountain I as a small triangular blade with a short pointed stem, while the Morrow Mountain II is described as a long narrow blade with a long tapered stem. While he describes them as different types, he notes that many people have chosen not distinguish between the two.

[3] Preforms represent an intermediate stage between flakes from secondary cores and quarry blades. Some are worked bifacially, although most are unifacial and still retain the platform and bulb of percussion. Quarry blades are usually bifacially worked and are made to allow easy transportation of lithic materials until the time it is needed to be made into a projectile point. Some researchers have used the terms preform and quarry blade interchangeably, meaning the bifacially worked ovate blade.

[4] According to the system, based on Strahler (1964) 1st order streams are the fingertip tributaries at the head of a stream and may either be year-round or seasonally flowing streams. A 2nd order stream is formed by the confluence of two 1st order streams. A 3rd order stream is formed by the confluence of two 2nd order streams, etc. This system requires that at least two streams of a given order be joined to form a stream of the next highest order. The main stem of a river will always have the highest order.

whereas smaller streams had a higher density of deer and nut masts. The resulting archaeological assemblages from these distinct areas should, themselves, be distinct (House and Ballenger 1976; Sassaman and Anderson 1994). They divided their sites into habitation and extraction sites[5] using a lithic tool classification scheme that would allow functional sorting of the two site types. From the information gathered using this analysis, coupled with data on the seasonal availability of resources, they created a Middle and Late Archaic settlement model:

> involving spring and summer residence along major rivers; a move to seasonal base camps in upland creek valleys in September to take advantage of deer concentration in upland hardwood zones, with some exploitation of other resources as well; and then a return to riverine-located winter quarters with permanent houses in about December when the coldest months arrived, the deer rutting season came to an end, and the acorn mast in the hardwood forests began to be exhausted (House and Ballenger 1976:117).

The Windy Ridge site (House and Wogaman 1978), while fitting the expected upland site profile as proposed by House and Ballenger (1976), may have been used as a habitation site during the Middle Archaic. Other projects also complicated the model. Work in the Richard B. Russell Reservoir (Anderson and Schuldenrein 1985; Tippett and Marquardt 1981) examined a number of sites with Morrow Mountain components. Interestingly, none of these riverine sites produced denser or more diverse remains than did inter-riverine sites. This suggested that Middle Archaic people were not using the riverine and inter-riverine areas much differently in this part of the state (Sassaman and Anderson 1994:137).

Sassaman (1983) attempted to more closely examine Middle and Late Archaic settlement patterns by examining sites from a number of piedmont studies. He found that Middle Archaic settlement in the South Carolina Piedmont did not fit the riverine-inter-riverine model. This suggested that Middle Archaic people were much more mobile, perhaps moving residences every few weeks which fit Binford's (1980) definition of a foraging society. Binford (1980) proposed that foragers had high levels of residential mobility, moving camps often to take advantage of dispersed, but similar resource patches. Collectors stayed in one location longer, by sending out specialized work parties to exploit resources in widely dispersed and distinct resource patches. He believed that differences in environmental structure could be traced to large scale climactic factors. He further noted that a collector system could arise under any conditions that limited the ability of hunter-gatherers to relocate residences. During his work in the Haw River area of North Carolina, Cable (1982) argued that postglacial warming at the end of the Pleistocene led to increased vegetational homogeneity which encouraged foraging.[6]

Sassaman (1983) suggests that this indicates a large degree of homogeneity of the piedmont environments. They also had a high degree of social flexibility, allowing them to pick up and move when needed. This high level of mobility did not allow them to transport much material, which in turn, alleviated the need for elaborate or specialized tools to procure and process resources at locations distant from camp. Since quartz is practically everywhere in the piedmont, tools could be easily replaced and were expedient. The high mobility and the expediency of tools helps to explain the abundance of Middle Archaic sites in the piedmont without having to imply a population explosion. Sassaman called this model the "Adaptive Flexibility" model (Sassaman 1983; Sassaman and Anderson 1994).

[5] An extraction site is an area where resources (such as fish, lithic raw material, etc.) were obtained and is often represented by lithic debitage and perhaps small camp sites. A habitation site is a seasonal or temporary camp where these resources were usually consumed, used, or worked.

[6] Since the vegetation was homogeneous and there were no concentrations of resources people moved from place to place foraging rather than settling near or in these resource concentrations.

Late Archaic

Savannah River Stemmed and Otarre[7] stemmed points are the primary indicators of Late Archaic settlement in the Laurens-Anderson study area. Ten Savannah River phase sites and seven Otarre phase sites were identified. Quartz tools, which were found in overwhelming abundance at earlier sites, consisted only of about 57% of the Savannah River assemblage. Other materials included "silicates, volcanic slate/argillite, and unknown igneous/metamorphic" (Goodyear et al. 1979:207). The Otarre assemblage reflected a trend away from igneous/metamorphic rock, with a concentration of quartz and siliceous materials. The incorporation of more types of lithic raw material as well as the fact that Late Archaic diagnostics are much fewer than Middle Archaic diagnostic artifacts indicates a sharp decrease in residential mobility.

Many of these Late Archaic sites produced fire cracked rock which was found on major ridges between watersheds. Goodyear et al. (1979:209-210) found that the inter-riverine picture of the Late Archaic contrasted quite sharply with river sites. Artifacts at riverine sites were diverse and included steatite vessels and netsinkers[8], ground stone axes, rock mortars and handstones, atlatl weights, and chipped stone drills. In the upland sites, the assemblage consists almost entirely of chipped stone bifaces and debitage. Purrington (1983) also noted this trend for the mountain region of North Carolina. At the Savannah River Plant, both riverine and upland sites contained a full range of tools, but no architectural features have been located.

Soapstone became an important lithic resource in the Late Archaic period for manufacturing of cooking vessels, and a number of soapstone quarries have been identified in Spartanburg and Cherokee counties (Ferguson 1976). Unfortunately, little is known about patterns in local soapstone use, although Elliott (1981) argues that soapstone exchange in the upcountry was facilitated by local reciprocal relationships. Soapstone was also probably used as a mechanism to maintain long distance relationships through long distance trade. Sassaman et al. state that:

> [c]ompared to sites in the upper and lower reaches of the Coastal Plain, a higher proportion of sites in the middle portion of the plain contain soapstone artifacts. This may indicate that soapstone distributions were not merely the result of distance-decay from sources, but were much more dependent on the social composition of exchange alliances (Sassaman et al. 1988:90).

For the Late Archaic, John White (1982) also applied a riverine/inter-riverine dichotomy. He demonstrated that riverine sites were much more dense and diverse than inter-riverine sites, but also identified the existence of diverse and sometimes dense assemblages at upland sites. He argued that they were habitation camps during periods of seasonal dispersal from riverine aggregation bases.

Although Steven Savage (1989) has proposed a "Late Archaic Landscape" model, a number of researchers (i.e. Anderson 1989a; Cable 1994; and Rafferty 1992) have noted that his study was seriously flawed by the "misappropriation of data from the Richard B. Russell survey" (Sassaman and Anderson 1994:142). The purpose of the work was to attempt to apply the locational methods of GIS to the analysis of Late Archaic social systems in the Upper Savannah River Valley. However, he only chose to use early intensive survey data and ignored subsequent data from testing and excavation. In addition, he chose to ignore problems such as multicomponentcy and representativeness (Cable 1994). Although it was considered a noteworthy study since it was the first to use Geographic Information Systems (GIS) for the analysis of settlement distribution, "the errors detract from the potential value of Savage's approach"

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[7] According to Oliver (1981) the Otarre type is contemporaneous with the Savannah River stemmed type and fall within the category of "Small Savannah River Stemmed".

[8] Sassaman (1991:87-88) states that "perforated and grooved objects are common items in Late Archaic assemblages of the Savannah River Valley. Both the grooved and perforated varieties have been referred to as "netsinkers", but the more common perforated slave was apparently used as a cooking stone."

(Sassaman and Anderson 1994:142).

Woodland Period

The Woodland period begins, by definition, with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast and much later in the Carolina Piedmont, about 500 B.C. Regardless, the period from 2000 to 500 B.C. was a period of tremendous change.

The subsistence economy during this period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish. Various calculations of the probable yield of deer, fish, and other food sources identified from some coastal sites indicate that sedentary life was not only possible, but probable. Further inland it seems likely that many Native American groups continued the previous established patterns of band mobility. These frequent moves would allow the groups to take advantage of various seasonal resources, such as shad and sturgeon in the spring, nut masts in the fall, and turkeys during the winter.

Early Woodland

Brooks and Hanson (1987) noted significant changes in the density and distribution of upland tributary sites during the Woodland period in the Steel Creek area of the Savannah River Plant. Brooks proposed that as tributary associated habitats became more productive with floodplain maturation that upland tributary terraces became areas of more permanent occupation. For the Savannah River area, the data suggested to Brooks that annual settlement ranges in the Early Woodland period were restricted to tributary watersheds (Sassaman et al. 1990:315).

Artifacts typical of the Early Woodland in the Upper Piedmont consist of Dunlap and Swannanoa ceramics (similar to the Kellog focus of Northern Georgia). The Dunlap series is characterized by a medium to coarse sand paste, fabric impressions, and vessels with a simple jar or cup form. The Swannanoa ceramics, with heavy crushed quartz temper, are cord marked or fabric impressed conoidal jars and simple bowls. Other surface treatments consist of simple stamping, check stamping, and smoothed plain (Keel 1976:230). Early Woodland projectile point types consist of Savannah River Stemmed (and its variants) and Swannanoa Stemmed.

Land use during the Early Woodland period in some areas of the Piedmont suggests extensive use of the inter-riverine zone. Two sites (one in Greenville County and one in Laurens County) contained dense remains and were located on the south face of a slope adjacent to springs. Goodyear et al. (1979:230) suggest that these sites "reflect a fall-winter occupation period with subsistence activities primarily related to nut gathering and deer hunting. If these two sites in fact represent fall-winter base camps it would represent a strong break with previous Archaic systems and their settlement strategies for exploiting inter-riverine biotic resources". Based on these previous studies, Early Woodland sites are most likely to be found adjacent to springs or the upland terraces of tributaries.

Middle Woodland

The Middle Woodland period is found "virtually lacking" in the Laurens-Anderson inter-riverine zone. One densely occupied site in adjacent Laurens County was found in an unusually large floodplain of a rank 2 stream. Goodyear et al. state that:

> [g]iven the habitation like character of this site, plus the large number of simple stamped bearing floodplain sites along larger streams such as the Reedy River, it is tempting to see agriculture playing a role in the apparent re-orientation to flood-plain environments during the middle Woodland period in the Piedmont environment. In this regard, the middle Woodland period sites and their locations would seem to presage the late prehistoric Mississippian period pattern during the latter, where large agriculturally related villages were constructed

along fertile stretches of floodplain (Goodyear et al. 1979:230-231).

This new pattern is also reflected in the Savannah River Valley where Savannah terrace sites at the mouth of Upper Three Runs Creek were being occupied again for intensive settlement. Midden accumulations at several sites indicate long term occupation or repeated occupations of these sites by relatively large groups (Sassaman et al. 1990:315).

Pottery typical of the Middle Woodland in the Upper Piedmont consists of the Pigeon and Cartersville series. Pigeon is quartz tempered with surface treatments of check stamping, simple stamping, and brushing. The Cartersville type is characterized by sand or grit paste with the primary surface treatment being cordmarking, although there are also check stamped and simple stamped varieties. The Cartersville series is thought to be closely related to the Deptford series on the Coast. Anderson and Schuldenrein (1985:720) suggest that Cartersville continues well into the Late Woodland period. Projectile points typically found in association with these pottery are the Pigeon Side Notched and Corner Notched types.

Testing at 38LU107 (Wood and Gresham 1981) demonstrated that one of the most intensive occupations of this multicomponent site was during the Middle Woodland period. This site is located on a knoll adjacent to South Rabon Creek, near its confluence with North Rabon Creek. A number of features were encountered including a large, deep pit, post holes, and a stone hearth. This indicated that even sites on plowed knolls can and do produce subsurface features.

Since the Middle Woodland period reflects a new pattern of settlement, questions regarding how quickly this change occurred and how the transition to horticulture affected their material culture should be examined. Clearly, this change did not occur over night and perhaps examination of radiocarbon dates from upland and riverine sites during this transition period will begin to clarify questions regarding change in lifeways.

Late Woodland

Small triangular points which are generally believed to be diagnostic of the Late Woodland and Mississippian periods consisted of 12 examples in the Laurens-Anderson study. Ten of these were manufactured from quartz while the other two where manufactured from either rhyolite or a Piedmont silicate. These projectile points were typed as "Mississippian triangulars" and included what they believed were Uwharrie or Pee Dee Triangular types and the Hamilton Incurvate Triangular type. Napier and Connestee Series pottery are typical Late Woodland types for the Upper Piedmont region. The Napier series is a fine sand tempered ware with fine complicated stamped designs. The Connestee series is a thin walled sand tempered ware with brushed or simple stamped surface decorations. There are also cordmarked, check stamped, fabric impressed, and plain varieties (Trinkley 1990).

According to Sassaman et al. (1990:317) Late Woodland occupations in the Savannah River Valley consisted of small habitation sites along all available terrace locations of both tributaries and the Savannah River. This increasing use of low-lying terraces suggests the increased exploitation of floodplain habitats, perhaps including maize agriculture, although no direct evidence has yet been found at the Savannah River Site.

Keel (1976) reported on the Garden Creek Mound No. 3 which contained a dominant Connestee component based on George Heye's 1915 examination of the mound. Later work at Garden Creek Mound No. 2 examined a portion of a village with a large quantity of Connestee remains. A number of post holes were exposed revealing one discernable square house with rounded corners measuring about 19 by 19 feet in outline. In addition, there were a number refuse pits and hearths. The hearths included both rock filled and surface hearths. There were also a number of burial pits (see Keel 1976:99). It is likely that Connestee sites in the Upper Piedmont will contain similar features.

Mississippian Period

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 1640 is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease.[9] The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers.

In the Upper Piedmont, Mississippian pottery includes the Pisgah and Qualla series. Pisgah ceramics are tempered with unmodified river sand, although some earlier examples contain both river sand and crushed quartz. It is decorated with complicated stamping, check stamping and ladder-like rectilinear patterns (Dickens 1970; Holden 1966). It should be noted that the Qualla series extends well into the historic period (ca.1500-1908) and is characterized by complicated stamping and bold incising. Other types described by Egloff (1967) include burnished, plain, check stamped, cord marked, and corncob impressed. At Tuckasegee brushed examples were also identified (Keel 1976). Other artifacts associated with the Mississippian period include triangular projectile points, flake scrapers, microtools, gravers, perforators, drill, ground stone objects (celts, pipes, and discoidals), and worked shell and mica (Keel 1976).

Very little evidence of Mississippian period occupation was found in the Laurens-Anderson interriverine survey area which is not surprising given the focus on riverine resources during this time period. Very little evidence of Mississippian occupation has been documented at the Savannah River Plant and no formal settlement-subsistence model has been created for this area (Sassaman et al. 1990:317). However, Anderson (1994) has provided a detailed examination of evidence for political change at Mississippian sites in the Savannah River Valley and should be consulted for more information.

Excavations at large Mississippian sites in the Upper Piedmont include work at the I.C. Few site which was examined as a part of the Keowee-Toxaway Reservoir project sponsored by Duke Power Company (Grange 1972). Simpson's Field (38AN8) on the Savannah River was also investigated during the Richard B. Russell Reservoir studies (Wood et al. 1986). Work at the Chauga site (38OC47) in nearby Oconee County evidenced occupation in the Early and Late Mississippian period. Ten stages of mound building were found at the site along with burials and palisades. There is evidence for increasing impoverishment of the residents through time, since burials associated with the latest phases of mound building contained fewer grave goods than earlier phases in both the occupation during the Early Mississippian and the Late Mississippian (Anderson 1994:303-305). Homes Hogue Wilson (1986) examined burials from the Warren Wilson site in western North Carolina and provided some preliminary conclusions regarding social structure based on location of burials according to age and sex. For instance, she found more males than females were buried under structure floors. These males included primarily those under 25 or over 35 years old. She also found that individuals buried inside of structures were more likely to have burial goods than those buried in public areas. Burial feature types included pit burials, side-chambered burials, and central-chambered burials. Studies such as this can give great insight into the social organization of prehistoric societies.

The largest amount of regional work has taken place in the North Carolina mountains at sites such as Tuckasegee, Garden Creek, and Warren Wilson. At Tuckasegee a possible town house was uncovered measuring about 23 feet in diameter with a central hearth (Keel 1976). At Warren Wilson several roughly square structures were uncovered and they all measured on the average about 21 feet square. Burials were common inside of these houses and pit features were abundant. Artifacts at the Warren Wilson site included ceramics from the Swannanoa series up through the Pisgah series. (Dickens 1970).

[9] Small pox was a major cause of death to a large number of Native Americans during the historic period. The smallpox epidemics of 1734 and 1783 reportedly killed half of the Cherokee population (Hatley 1993).

Historic Overview

Although exploration of the Savannah River Valley began as early as the sixteenth century (DePratter 1989), substantial settlement of the area did not begin until after the Yamassee Indian War (1715-1718). By the mid-eighteenth century, cattle ranchers and subsistence farmers cleared land and established small farms and plantations (Kovacik and Winberry 1987:69-71), and by the eve of the American Revolution cattle ranching was well established in the area (Brooks 1981).

After the initial settlements of the 1750s the white population of the Up Country did not increase significantly until 1761, with the expulsion of the Native American population at the end of the Cherokee War. This created a second wave of immigration and settlement, spearheaded by farmers from the northern colonies of North Carolina, Virginia, Maryland, and Pennsylvania. These settlers developed a self-sufficient economy based on planting flax, tobacco, corn, wheat, and oats, and raising cattle and hogs for their own use. Slaves were relatively uncommon until the early 1800s.

Anderson County is part of the Cherokee Indian lands, acquired by South Carolina in 1777. Mills observed that prior to this treaty:

> few of no emigrations extended as high up the country, as where Pendleton District is now located. By this treaty, accession of lands, and liberty to erect forts on the western frontier, as a barrier against the French on the southwest, were granted by the Indians (Mills 1826:671-672).

Both the treaty and events further north spurred settlement into the area. Most notably, the area was settled by Scotch-Irish from Virginia and Pennsylvania, augmented by Low Country families who came to the up country for summer comfort and remained permanently.

In this early period of European settlement there was little connection with the legal authorities on the coast (centered in Charleston), leaving the Up Country largely autonomous. This led to the Regulator Movement of the 1760s, a vigilante organization which attempted to maintain order and provide security. By the eve of the Revolution, two-thirds of the South Carolina population lived in the Up Country.

By the onset of the American Revolution, the population of the Up Country was quite diverse in its ethnic, religious, and political backgrounds. These differences seemed to localize the hostilities between Whigs and Tories living side by side (Wallace 1958).

Probably the most significant Revolutionary War activity in Greenwood County was at Ninety-Six, a British stronghold in the Up Country. The earthen star-shaped fort commanded by Lieutenant-Colonel John H. Cruger fell under siege by troops under the command of General Nathaniel Greene on June 18, 1781. The attempt to capture the fort failed, and Greene retreated toward Winnsboro. Later the British abandoned the fort because they were expecting the French at Beaufort.

The evacuation of Ninety-Six rendered the British hold on the middle and back country precarious and unprofitable. Partisans cut communications, seized supplies, and captured abandoned posts. No attempt was made to re-establish a British hold in the back country (Wallace 1951:317).

After the American Revolution, the village of Cambridge grew up on the site of the Ninety Six fortification. It thrived as a seat of the District Court and as an upcountry trading center until the first decade of the nineteenth century when it began to decline and finally passed out of existence in the mid-nineteenth century (Baker 1972:3).

A portion of the survey corridor (in what is today Abbeville County and Greenwood County) was historically part of the Abbeville District. In 1826 Mills indicated that:

> [t]he first important settlement in this district occurred as early as the

> year 1756, when Patrick Calhoun, with four families of his friends, settled at Long Cane Creek. On his arrival, there were only two families of white settlers, one named Gowdy, the other Edwards, in that northwestern extremity of the province. (Mills 1972 [1826]:348).

Anderson County was also formed in 1826 along with Pickens County from part of Pendleton District. A central location was selected for the location of the new county's courthouse and the county was named in honor of General Robert Anderson, a Revolutionary soldier who in 1801 had established Andersonville, a river town about 12 miles from modern Anderson, north of the confluence of the Savannah and Seneca rivers. The 1820 *Mills' Atlas* plan of Pendleton and Abbeville District (Figure 13 and 14) fails to reveal any subscribers in the Pendleton area of the project, and shows subscribers along roads in the Abbeville area.

With the introduction of the cotton gin in the late eighteenth century, the area experienced only slow and moderate changes in its society and economy. Initially an area of small, independent and diversified farmers, it slowly became characterized by larger cotton plantations, a reliance on slavery, and a one crop system eventually ruinous to the soil. By 1800 the population of the Abbeville district consisted of 13,500 inhabitants. Of theses 2,964 were slaves. In 1820, there were 13,488 whites, 9,615 slaves, 252 free blacks, totaling 23,167. This reflects an increase of 10,000 in 20 years (Mills 1972 [1826]:354). By 1850 the population consisted of 32,318 inhabitants. Slaves consisted of 19,262 individuals, freemen 357, and whites 12,699. By this time slaves made up 59.6% of the population as opposed to 41.5% in 1800. In 1850 the area produced 27,192 bales of cotton. Other important products were wheat, rye, oats, corn, and potatoes.

Anderson County had a much smaller population, with far fewer slaves than Abbeville. By 1850 the population included 13,867 whites and 7,514 African-American slaves. The area's 1,986 farms produced only 6,670 bales of cotton, compared with 120,382 bushels of wheat (second only to Laurens County). It also produced 240,277 pounds of butter and cheese, ranking just behind Abbeville County. Co-existing with agriculture, Anderson also supported a thriving industry which ranked fifth in annual production behind Charleston, Edgefield, Laurens, and Richland counties.

Westward emigration of people lured by the expanding cotton kingdom and increasing political polarization defending slavery grew in the first half of the nineteenth century, leading to almost unanimous citizen support in the area for nullification and secession. The county furnished 5,000 Confederate soldiers and became an ammunition-producing center. The county saw only two skirmishes and was spared from the devastation experienced by other South Carolina counties. The Anderson area was only slowly "reconstructed," supporting Wade Hampton and his Red Shirts and later supporting the outlaw, Manse Jolly.

The Civil War had little military impact on Greenwood or Abbeville County and no significant battles were fought in the Up County. It did, however, change the Up Country's history, destroying the basis of its wealth and creating in its place a system of tenancy -- the hiring of farm laborers for a portion of the crop, a fixed amount of money, or both.

Immediately after the Civil War cotton prices peaked, causing many Southerners to plant cotton again in the hope of recouping losses from the War. The single largest problem across the South, however, was labor. While some freedmen stayed on to work, others, apparently many others, left. An Englishman traveling through the South immediately after the war remarked that, "Thirty-seven thousand negroes, according to newspaper estimates, have left South Carolina already, traveling west" (quoted in Orser 1988:49).

The hiring of freedmen began immediately after the war, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely tempered by the enactment of

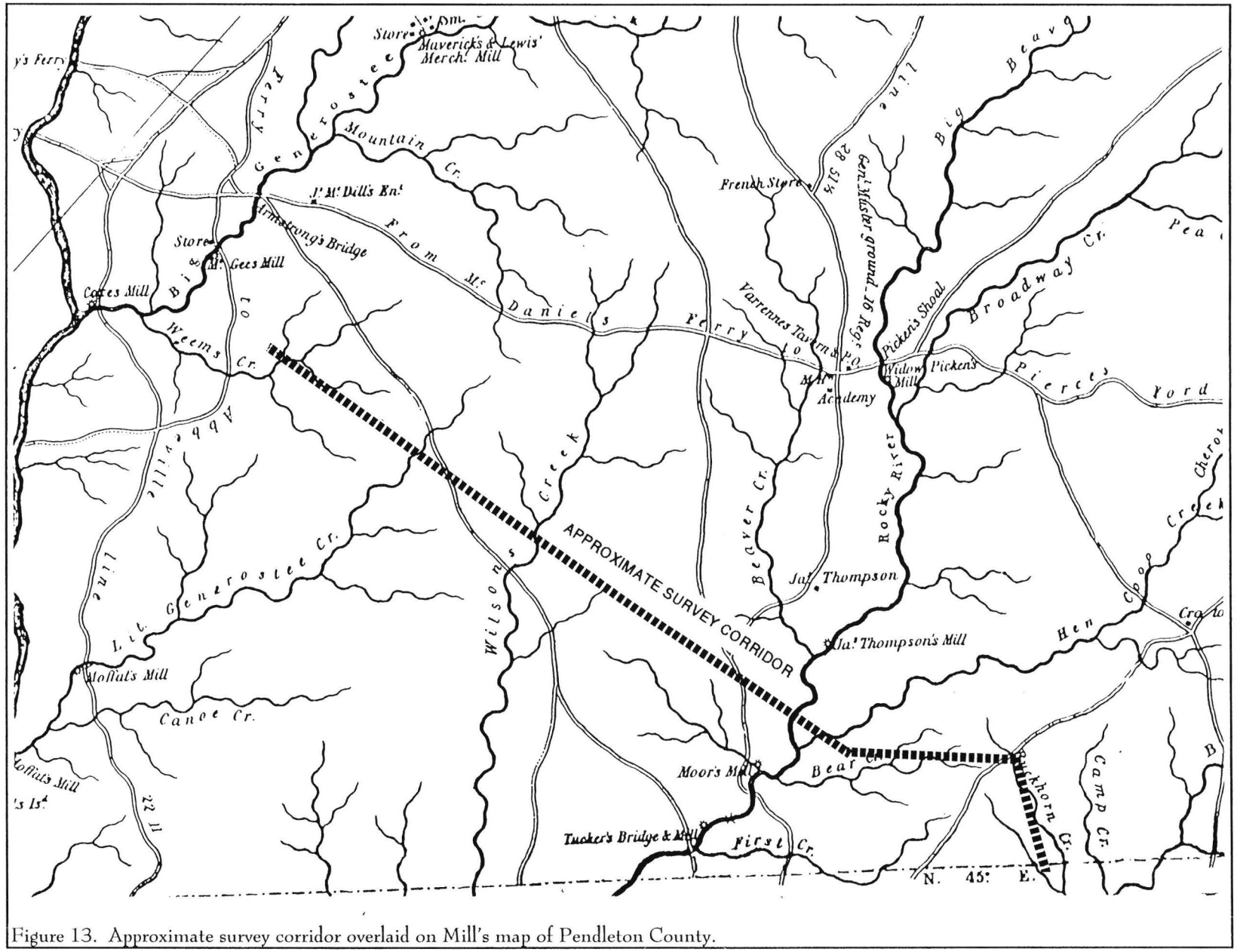

Figure 13. Approximate survey corridor overlaid on Mill's map of Pendleton County.

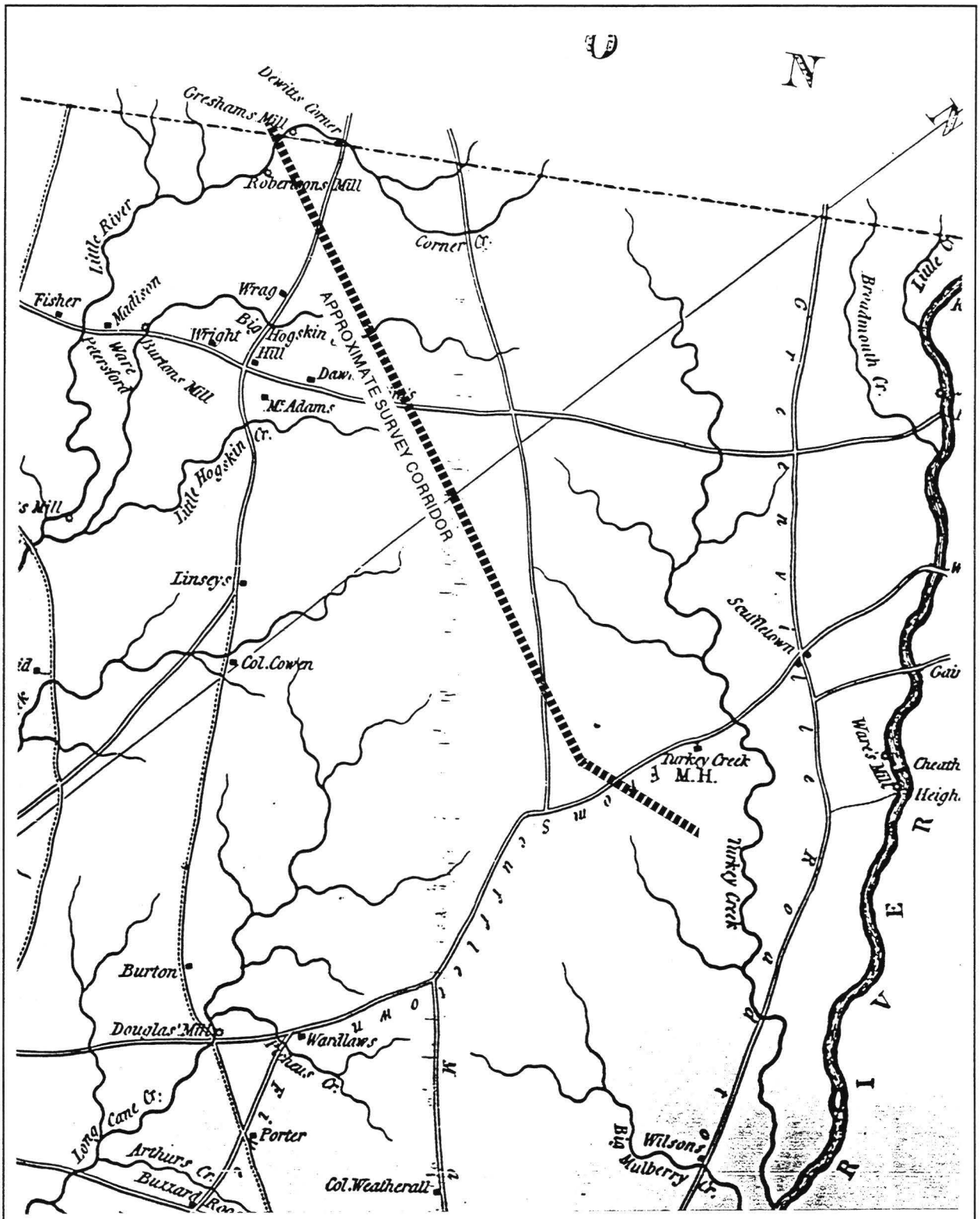

Figure 14. Approximate survey corridor overlaid on Mill's map of Abbeville District.

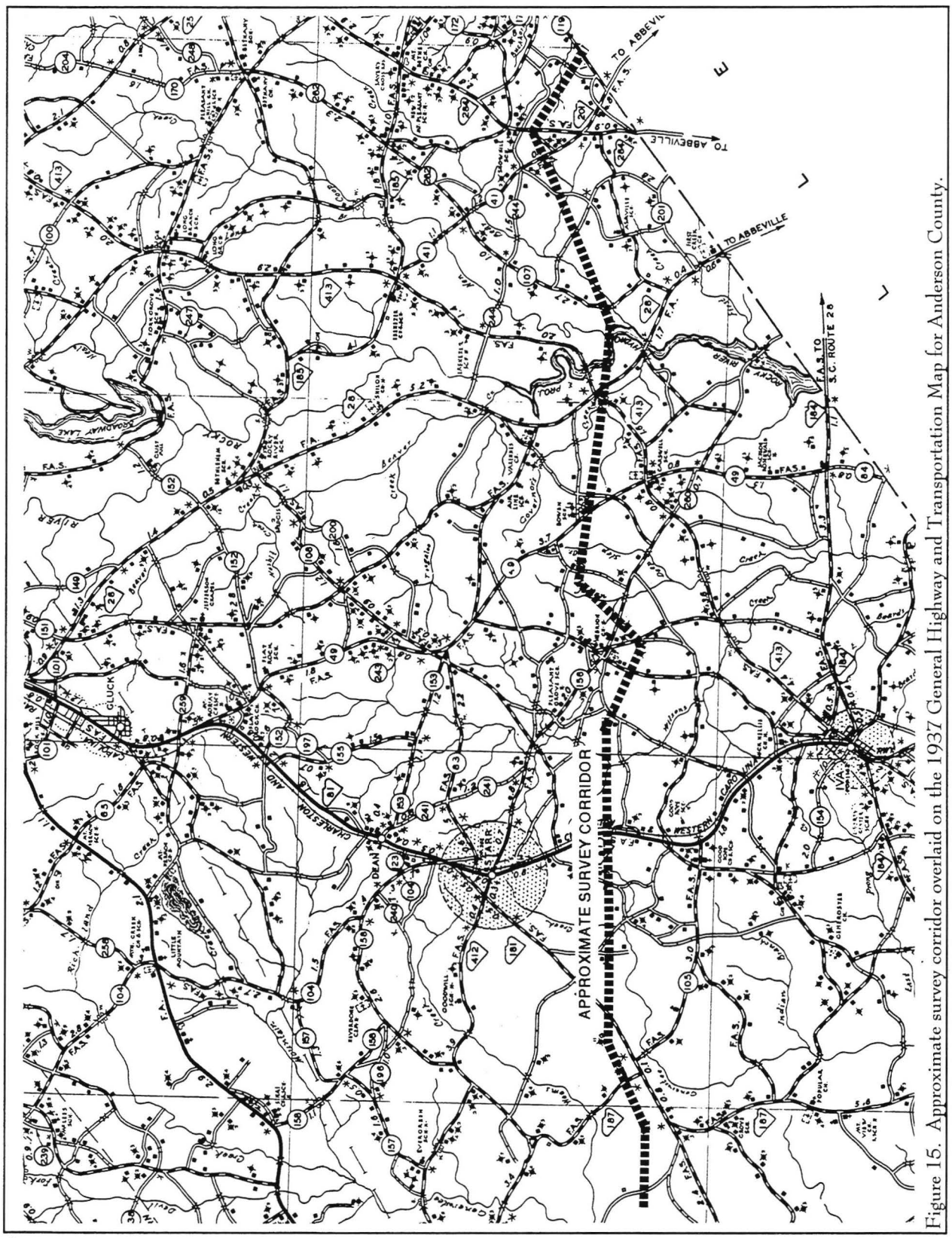

Figure 15. Approximate survey corridor overlaid on the 1937 General Highway and Transportation Map for Anderson County.

the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black majority (see Orser 1988:50). Added to the Codes wereoppressive contracts which reinforced the power of the plantation owner and degraded the freedom of the Blacks. The freedmen found power, however, in their ability to break their contracts and move to a new plantation, beginning a new contract. With the high price of cotton and the scarcity of labor, this mechanism caused tremendous agitation to the plantation owners.

Gradually owners turned away from wage labor contracts to two kinds of tenancy -- sharecropping and renting. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks. Sharecropping required the tenant to pay his landlord part of the crop produced, while renting required that he pay a fixed rent in either crops or money. In sharecropping the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else -- land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share-renting, the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest the crop was divided in proportion to the amount of fertilizer that each party supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash-renting the landlord provided the land and housing, with the renter providing everything else and paying a fixed per-acre rent in cash.

In the 1880s the Greenwood County area had no cotton mills and none under construction. Cotton was, however, being produced in large amounts and it was estimated that the average cost of producing merchantable cotton was about eight cents a pound and 40 dollars to bale 500 pounds. There were about 100 cotton gins in the county which moved from point to point as needed. It appears that a large portion of the manufacturing in the county was milling grain or producing lumber and turpentine. Of the 70 manufacturing establishments there were 25 flour and grist mills, seven grist mills, and 21 lumber mills. Other manufacturers included carriage and wagon factories, brick making and printing establishments (Anonymous 1884). There were 2,400 farms in the county with a total acreage of 144,714. Cotton made up 72,357 acres, corn 39,651 acres, oats 18,812 acres, wheat 11,432 acres, rye and barley 217 acres, high land rice 20 acres, sweet potatoes 361 acres, peas 868 acres and promiscuous 1157 acres (Anonymous 1884).

By the early twentieth century the area had shifted to textile manufacturing, although widely diversified products were also manufactured, including brooms, horse collars, mattresses, brick, cottonseed products, fertilizer, meal, flour, monuments, and metal shingles. Figures 15 and 16 show the General Highway and Transportation Map of Anderson County in 1937, and Abbeville County (1941) and Greenwood County (1938) revealing that the project corridor is largely open land, with houses primarily clustered along the secondary or farm to market roads.

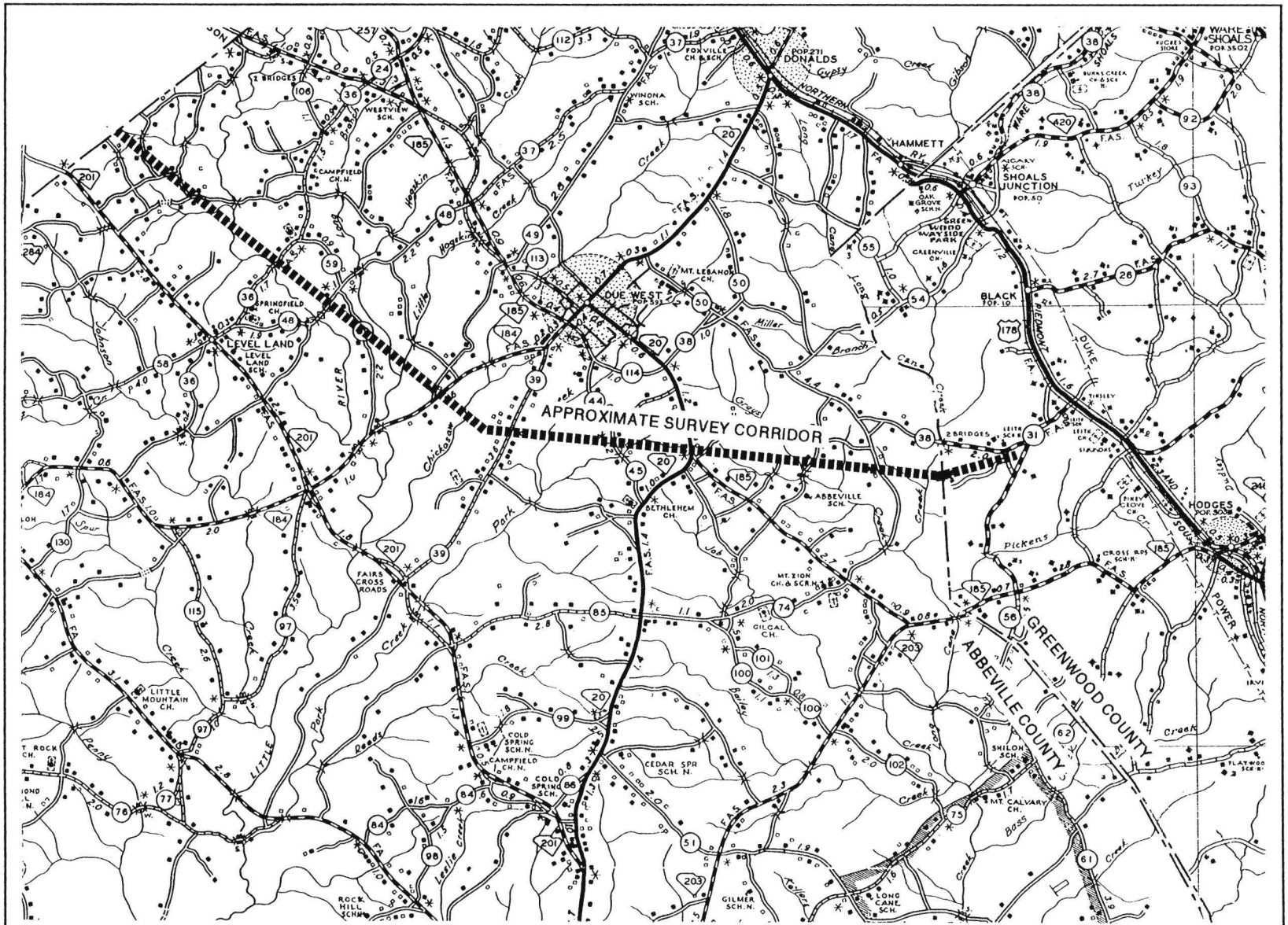

Figure 16. Approximate survey corridor overlaid on the General Highway and Transportation Map for Abbeville County (1941) and Greenwood County (1938)

METHODS

Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100 foot intervals. These tests would be placed along the centerline of the corridor, with all fill being screened through ¼ inch mesh. One transect, running down the centerline, was proposed since the corridor is only 85 to 100 feet wide. Although the centerline was not staked, points where the line intersected roads were staked, and half of the line paralleled an existing powerline (Figure 17). In areas of standing water, wetlands, and slope of greater than 15%, no tests would be excavated.

All soil would be screened through ¼ inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1 foot (although in portions of the survey corridor tests were excavated to a depth of approximately 2.5 feet). All cultural remains would be collected, except for shell, mortar, and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

During the survey it was noted that portions of the corridor had moderate to excellent surface visibility, so in addition to shovel testing, a pedestrian survey was performed. When sites were discovered, areas around them were examined to understand site dynamics. This was done to help determine site boundaries and site integrity.

Should sites (defined by the presence of two or more artifacts from either surface survey or shovel tests within a 25 feet area) be identified by shovel testing,

Figure 17. View of existing powerline that parallels survey corridor.

further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

A total of 158,400 shovel tests along the centerline were excavated within the study corridor; a total of 32,735 shovel tests were not excavated (Figures 18-22). The majority of these tests fell in drainages, creeks, rivers, steep slopes, or areas of standing water. Although not subjected to shovel testing, all of these areas were walked and, where possible, subjected to a pedestrian survey.

Site Evaluation

Sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;
- identification of the historic context applicable to the site, providing a framework for the evaluative process;
- identification of the important research questions the site might be able to address, given the data sets and the context;
- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

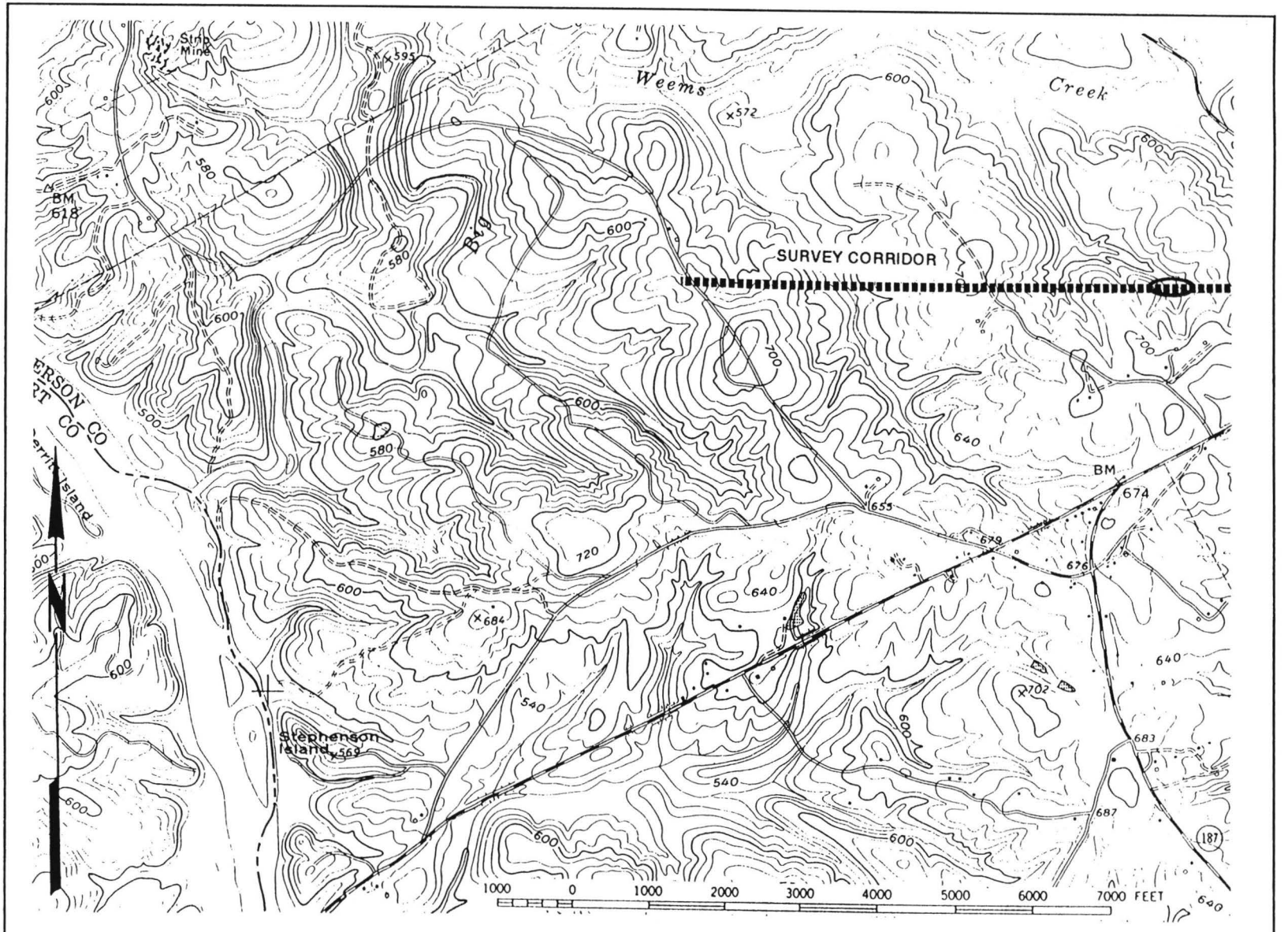

Figure 18. Areas at beginning of survey corridor that were not shovel tested (base map is Hartwell Dam 1959PR85).

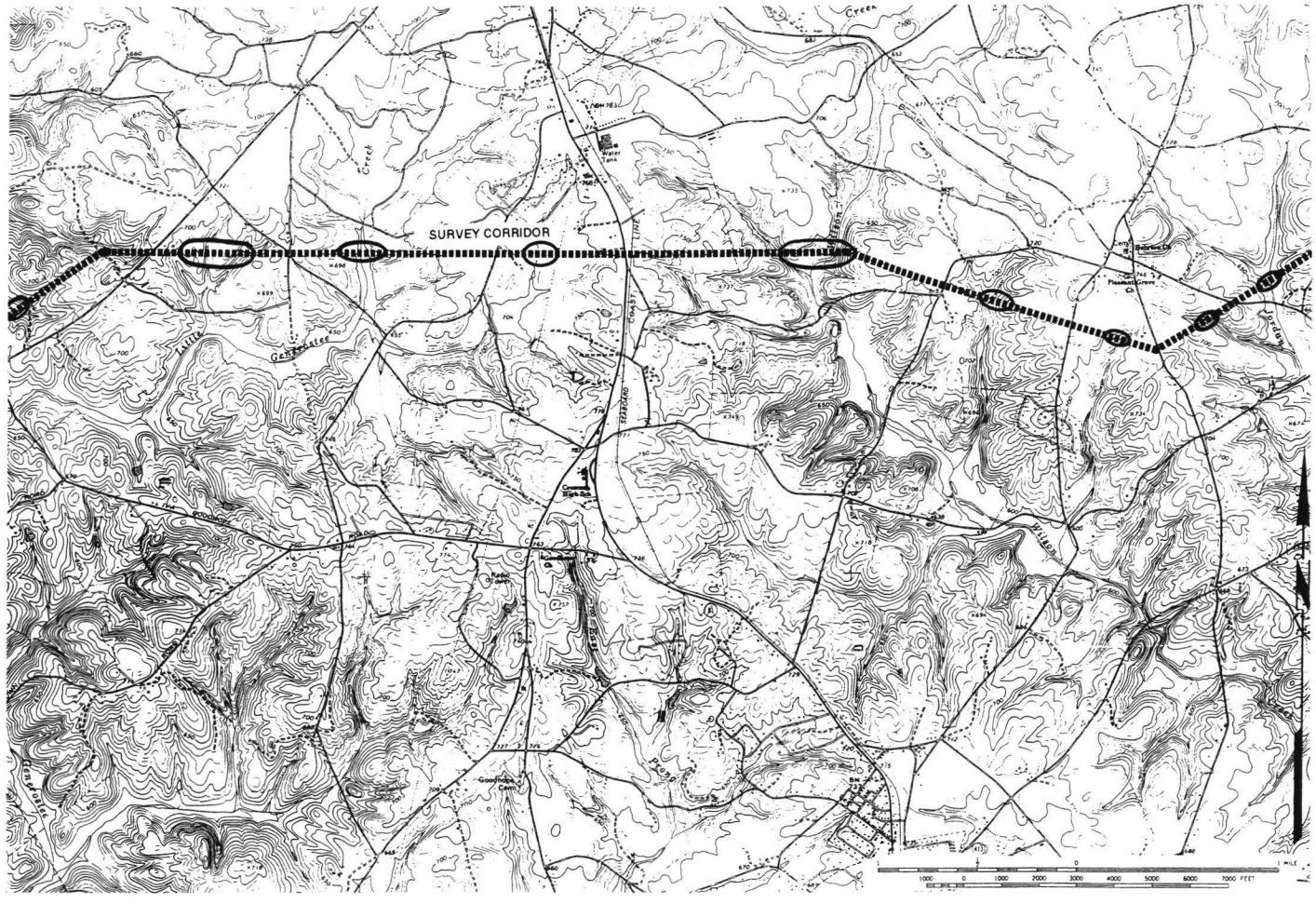

Figure 19. Areas of survey corridor that were not shovel tested (base map is Iva 1964PR79).

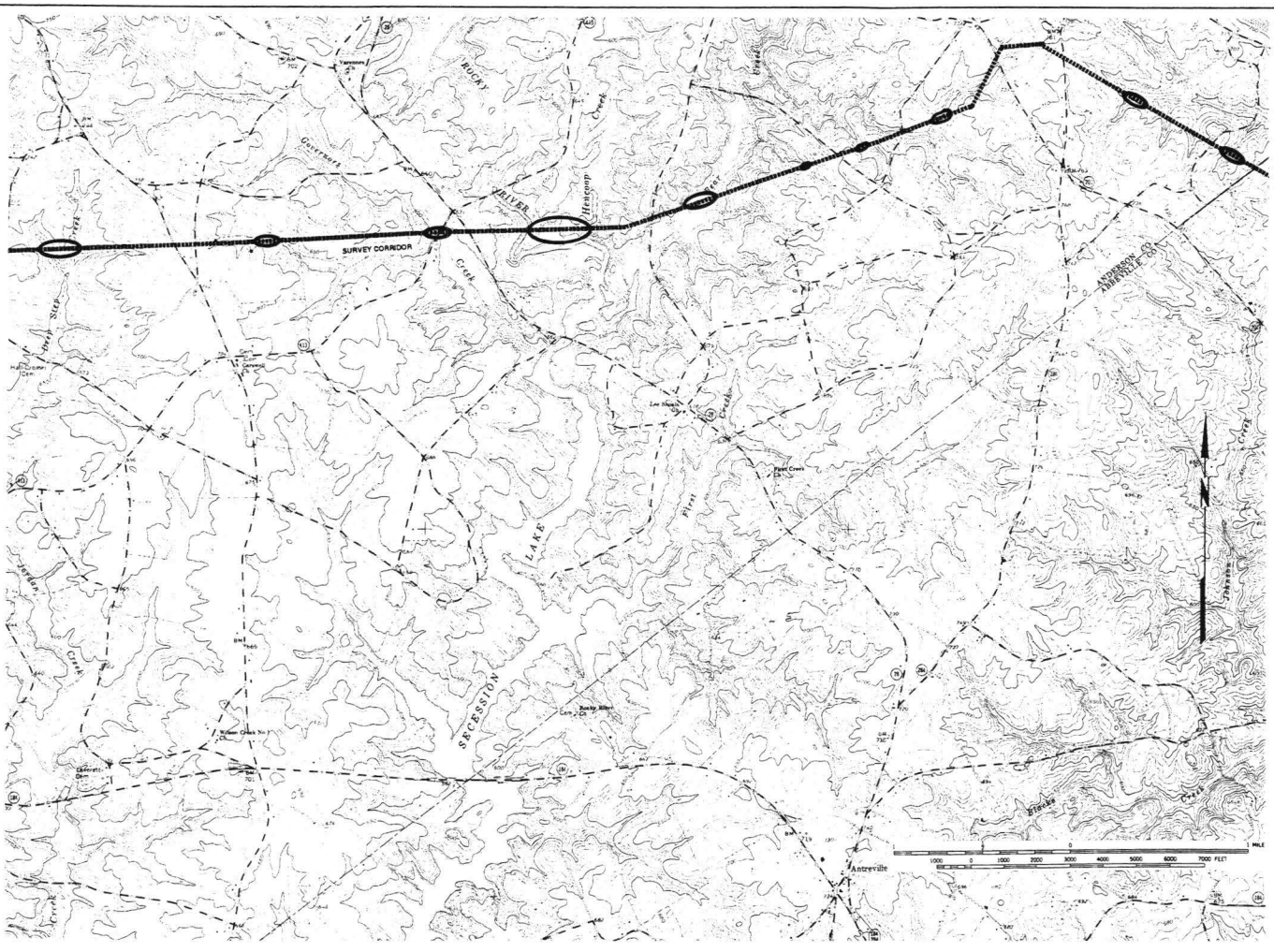

Figure 20. Areas of survey corridor that were not shovel tested (base map is Antreville 1964).

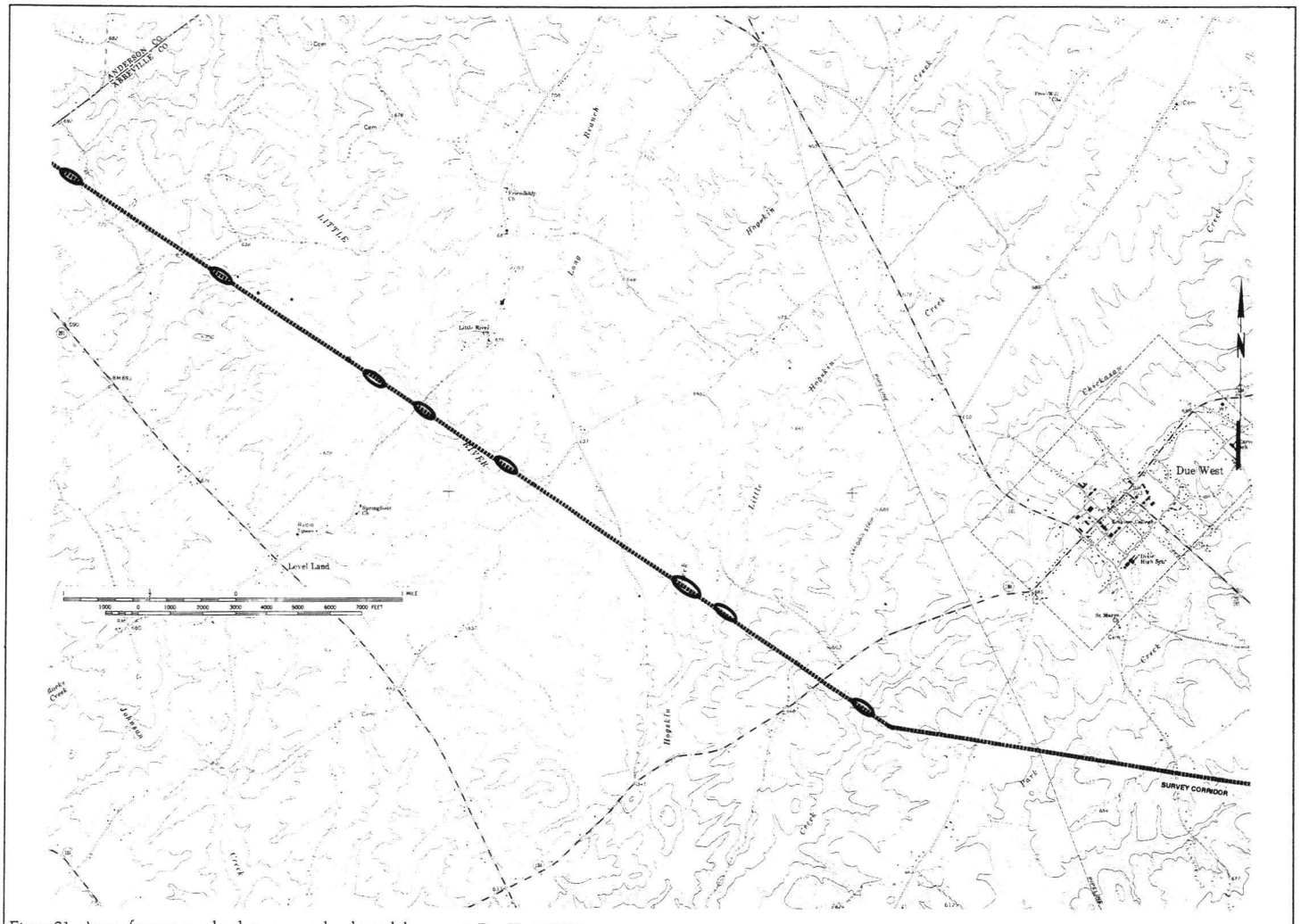

Figure 21. Areas of survey corridor that were not shovel tested (base map is Due West 1971).

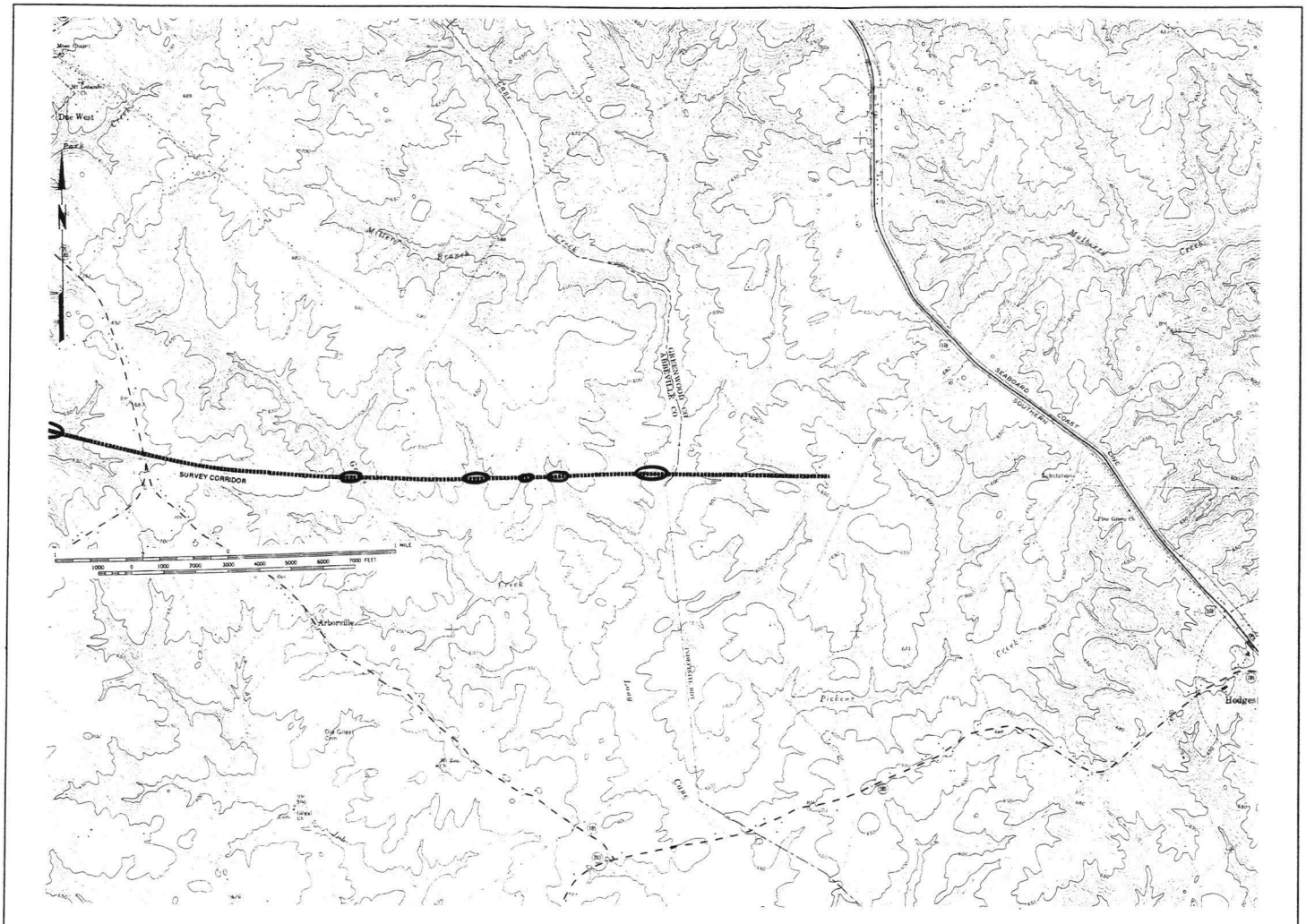

Figure 22. Areas of survey corridor that were not shovel tested (base map is Shoals Junction 1971).

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site form for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes and photographic materials have been prepared for curation using archival standards and will be transferred to the South Carolina Institute of Archaeology and Anthropology as soon as the project is complete. Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

RESULTS

Introduction

The intensive shovel testing and pedestrian survey identified fourteen sites and two standing historical structures along the 30 mile long corridor (Figures 23-26). Of the fourteen sites and two structures, one (38AB827) is considered potentially eligible for inclusion on the National Register of Historic Places.

Identified Sites

Site 38AN252 is a light surface scatter of historic artifacts located 25 feet south of SC Highway 181 (Figure 27). The Iva USGS topographic map shows 2 structures in this location. The site consists of six artifacts within a 150 foot by 150 foot area and was located during pedestrian survey of the area and tested using a controlled surface collection. No positive shovel tests were found along the survey corridor.

The site's central UTM coordinates are N3802900 E341360. The elevation is 700 feet AMSL. The topography is approximately 60 feet higher than the nearest water source (Little Generostee Creek), which is 1500 feet to the southeast.

The shovel tests soils in the survey corridor near the site belong to the Cecil sandy loam series. Shovel tests revealed a soil profile of brownish sandy loam (10YR 4/3 brown) from the ground surface to 3 inches below the surface and a hard red (2.5YR4/6) clay to the base of the tests. These soils are very eroded, with red clay subsoil visible at the ground surface in the surface collection area.

The data sets recovered during surface collecting at 38AN252 include two clear glass fragments, a milk glass fragment, two whiteware fragments, and a handpainted whiteware fragment. These artifacts suggest that the site dates to the late nineteenth or early twentieth century. The absence of surface artifacts and topsoil suggests that the site has been damaged through possible bulldozing of structures that once stood in the area, repeated plowing, and severe erosion. While there are a number of pertinent research questions that late nineteenth and early twentieth century sites can address, such research questions would require a much broader range of data then we have found at 38AN252. For example, to explore site function, it is necessary for the site to yield more artifacts, features, and material suitable for dating. It is also necessary for the site to exhibit, at the very least, some degree of intra-site patterning, perhaps concentrations of nails or other construction hardware reflected in surface collections or shovel testing density. None of these data sets necessary are present. It seems very unlikely that the site has the ability to provide the data sets necessary in order to address these questions. The site appears not only very superficial, yielding no materials in the shovel testing, but also appears to have been intensively plowed, further reducing the potential to recover in situ remains.

As a result, we recommend the site as not eligible for inclusion on the National Register of Historic Places and recommend no further management activities.

Site 38AN253 is a small subsurface scatter of early twentieth century artifacts located in a hay field west of Gentry Road (Figure 28). The site was located during shovel testing of the corridor. Further testing to delineate site boundaries indicates that the site covers an area of 90 by 75 feet. Five positive shovel tests produced a total of 8 artifacts, with no single shovel test producing more than 3 artifacts.

The site's central UTM coordinates are N3802720 E343600. The elevation is 700 feet AMSL and the topography is 50 feet higher than the nearest water source, Little Generostee Creek, which is

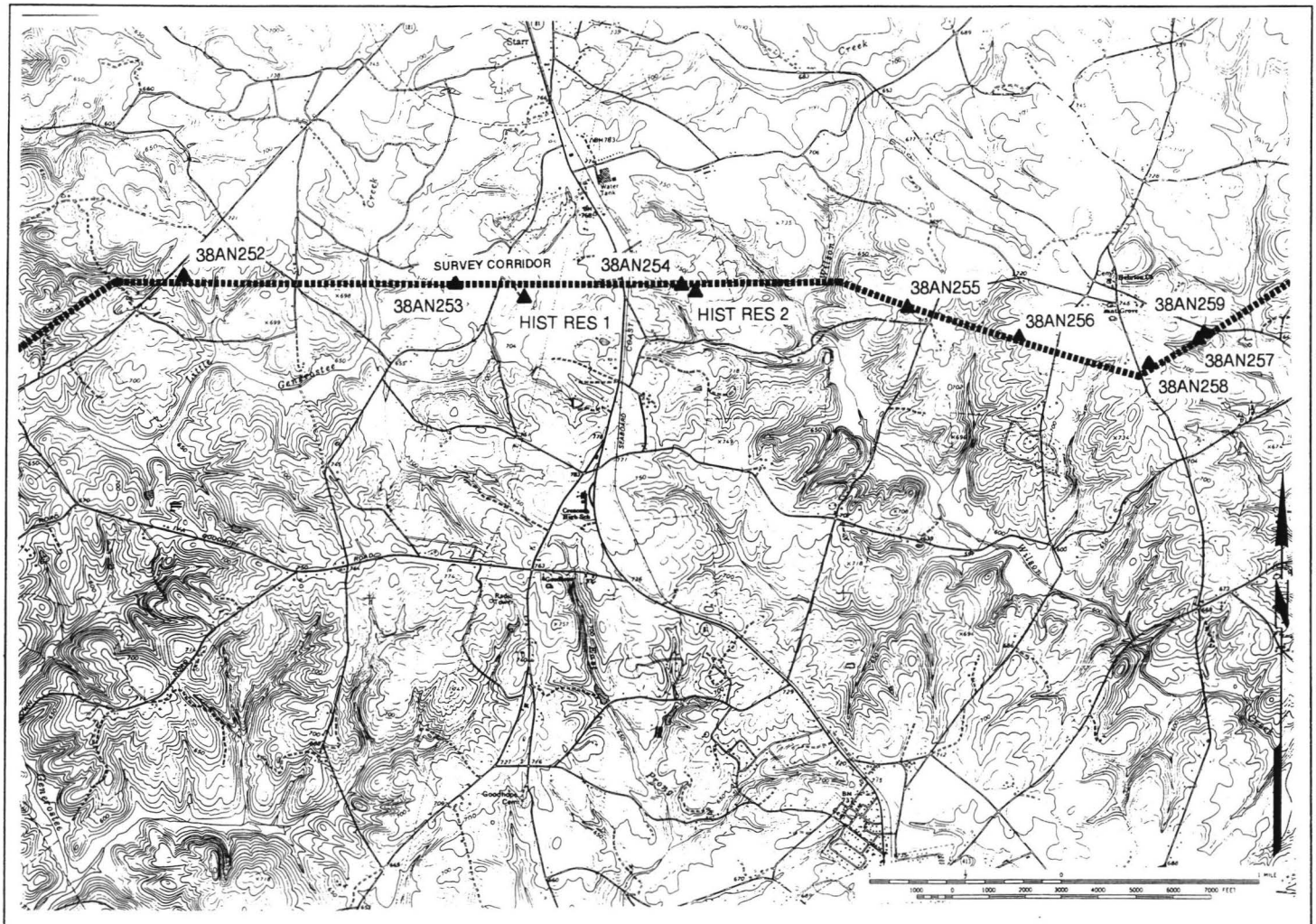

Figure 23. Sites located during survey (base map is Iva 1964PR1979).

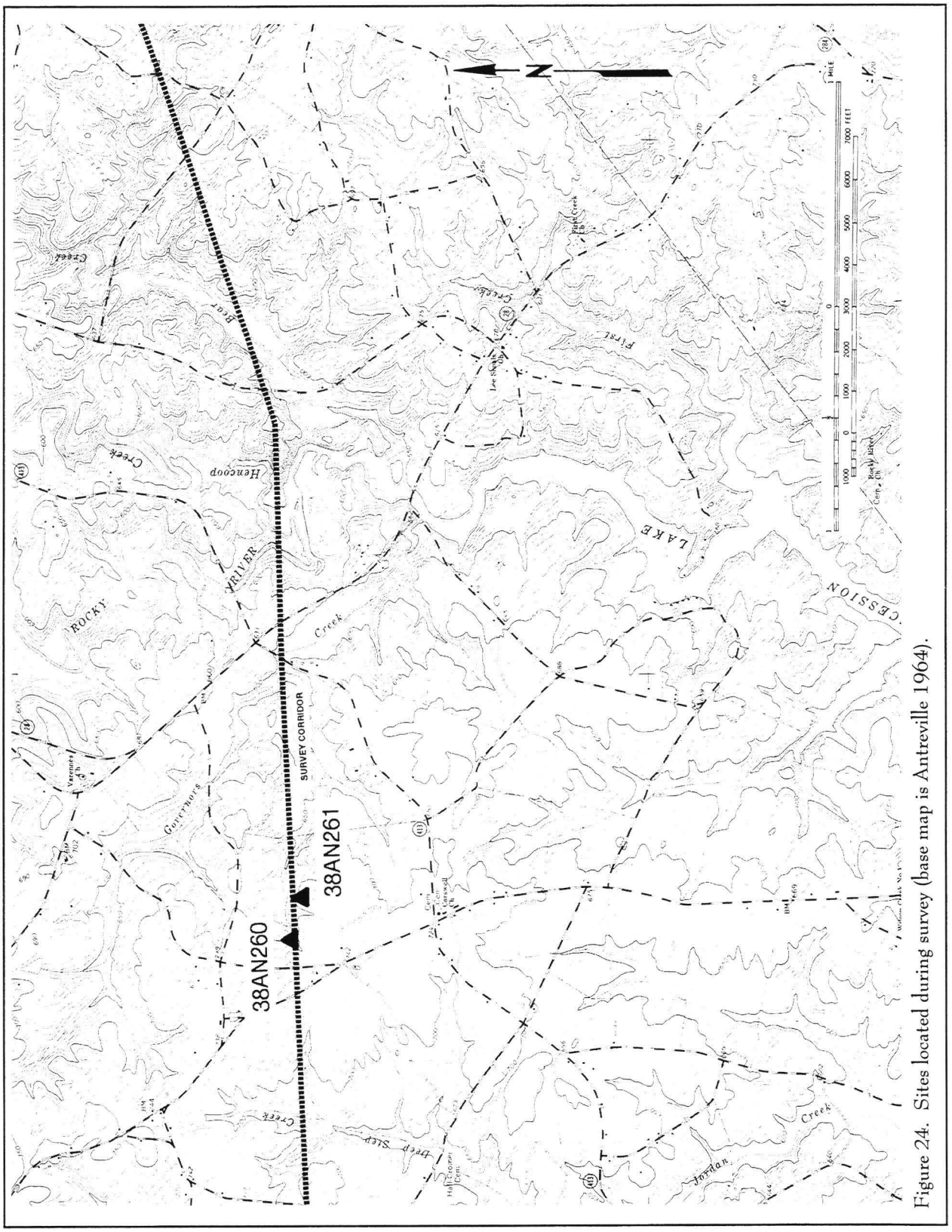

Figure 24. Sites located during survey (base map is Antreville 1964).

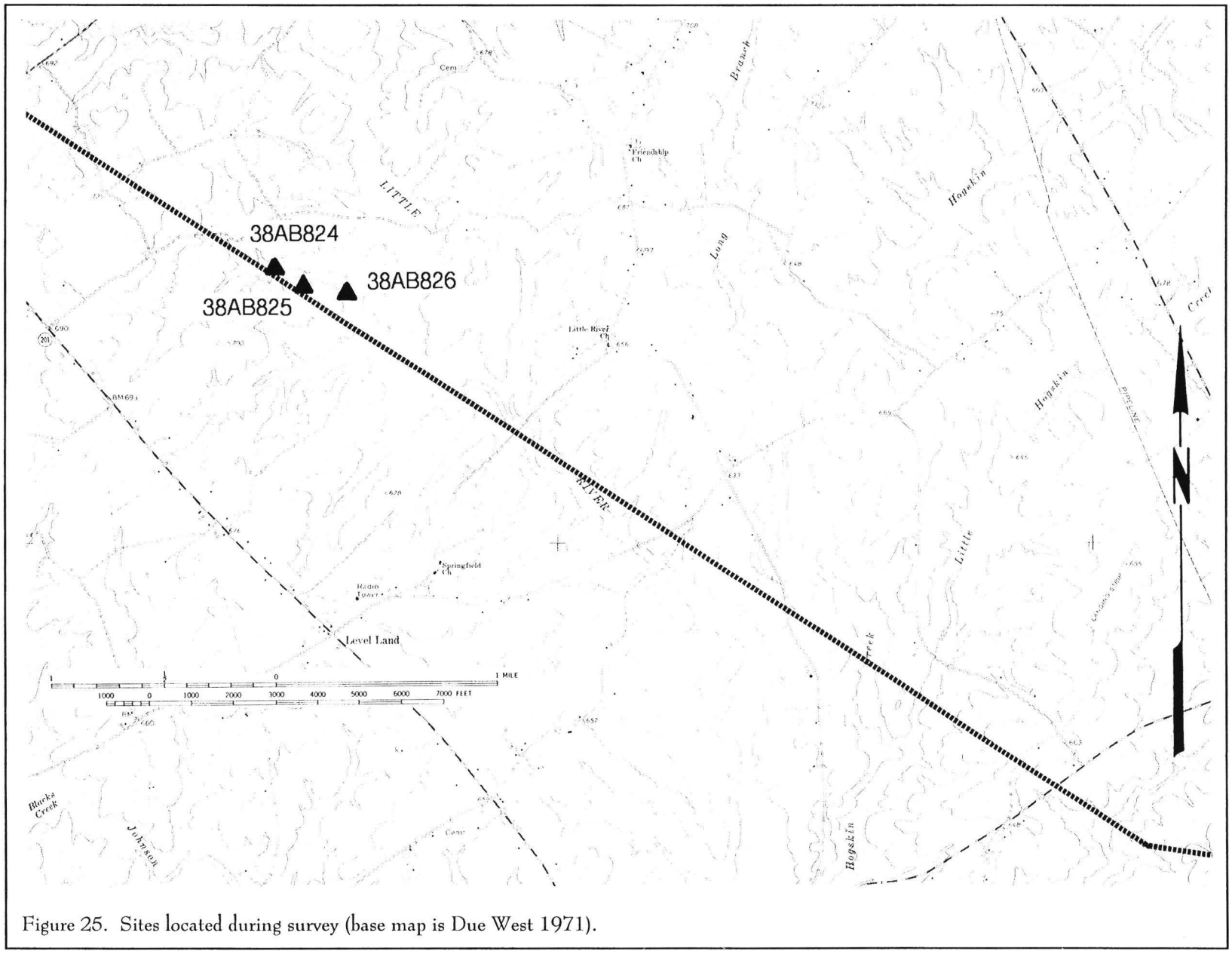

Figure 25. Sites located during survey (base map is Due West 1971).

500 feet to the south.

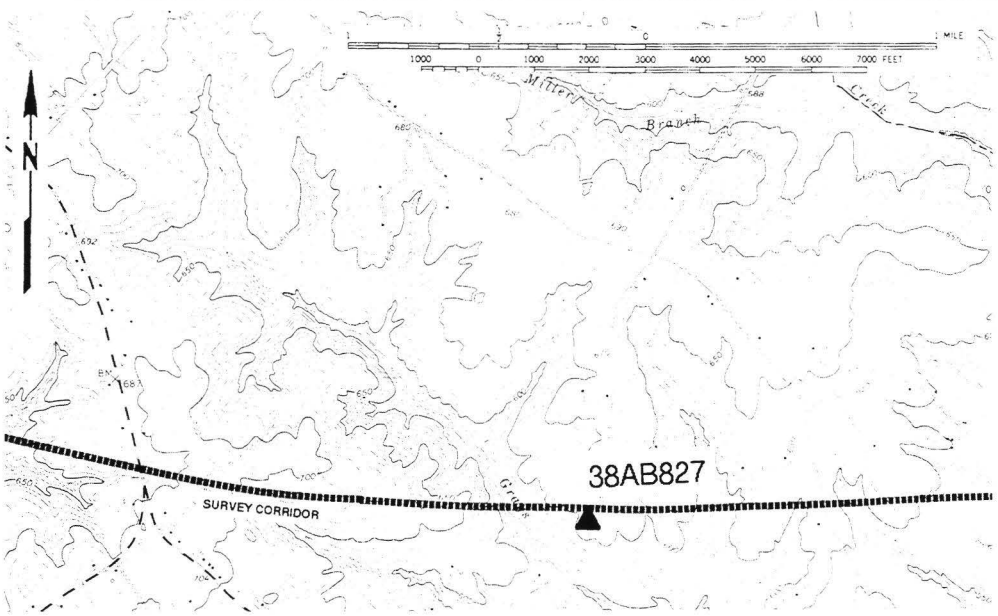

Figure 26. Sites located during survey (base map is Shoals Junction 1971).

The shovel test soils belong to the Cecil sandy loam series. These soils were also severely eroded, with less than two inches of brown (10YR4/3) sandy loam below ground surface, and subsoil, a hard red (2.5YR4/6) clay, encountered from two inches below the surface to the base of the shovel test. When compared with the general soil description for Cecil sand loams (Herren 1979:29-30), the shovel test soils indicate that at least four inches of the A horizon have eroded.

Data sets recovered from subsurface testing at 38AN253 include an amethyst glass fragment and a clear glass fragment recovered from N200 E200, a brown glass fragment recovered from N200 E225, two UID nail fragments and an amethyst glass fragment recovered fromN200 E250, an UID nail fragment recovered from N175 E200, and a green glass fragment recovered from N150 E200. It is likely that these artifacts date to the late nineteenth or early twentieth century. The site has most likely been damaged through repeated plowing and erosion, suggested by the shallow nature of the site and the depleted A horizon soils.

The small data sets present at site 38AN253 do not permit a discussion of significant research questions. In order to address any research questions, it would be necessary that the site contain more artifacts, features, and materials suitable for chronological control. These data sets are not present at 38AN253. It is unlikely that this superficial site has the ability to produce such data sets.

For these reasons, site 38AN253 is not recommended as eligible for the National Register of Historic Places and no further management work is recommended.

Site **38AN254** is a small lithic scatter eroding out of a dirt road embankment (Figure 29), which runs directly in line with the survey corridor.. The site, located 1600 feet east of SC Highway 181, covers a 5 foot by 15 foot area and includes a quartz shatter and two secondary quartz flakes. The surrounding area is a hay field. Shovel tests along the corridor produced no artifacts.

The central UTM coordinates are N3802670 E345500. The elevation is 710 feet AMSL and 1200 feet north of a finger of Wilson Creek, the nearest

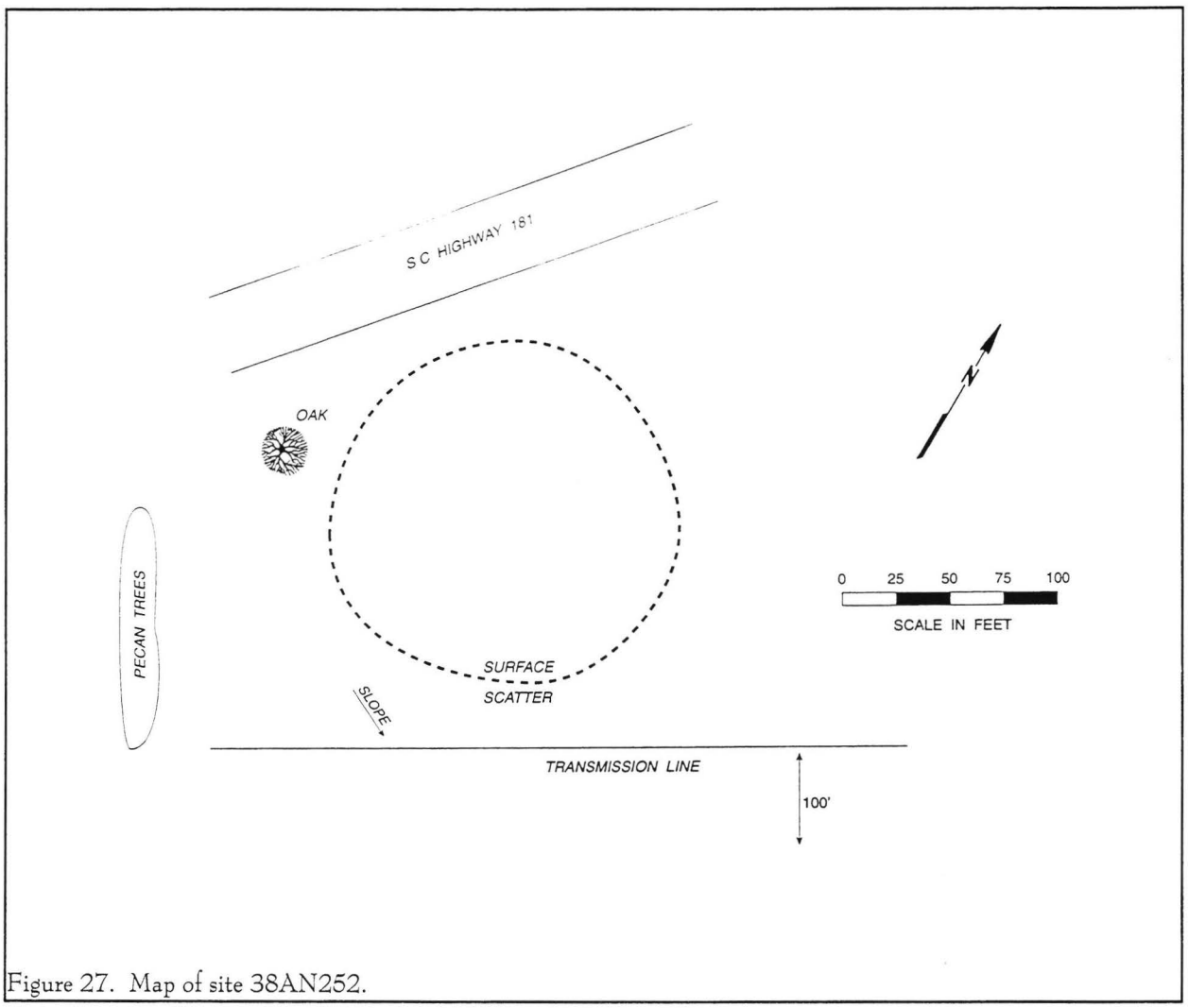

Figure 27. Map of site 38AN252.

water source. The soils in the area belong tot he Cecil sandy loam series. Shovel tests revealed the soil to have less than an inch of A horizon, a brown (10YR4/3) sandy loam, with the B horizon, a hard red (2.5YR4/6) clay extending to the base of the shovel tests. The eroded soils at the site had no A horizon, with the B horizon red clay visible at ground surface.

The data sets present at the site include only three non-diagnostic quartz lithics. These artifacts do not permit a discussion of significant research questions. In addition , the location of the site and the eroded soils at the site suggest that the site will not produce data sets necessary to address significant research questions.

As a result, site 38AN254 is not recommended as eligible for the National Register of Historic Places and no further management work is recommended.

Site 38AN255 is an isolated quartz Palmer corner notched point located in an old, fire-scarred field 800 feet west of Charles Beatty Road (Figure 30). The field was also damaged by bulldozers and the excavation of fire lanes. At the time of the survey, the ground visibility was greater than 75%, which permitted a pedestrian survey of the area. The point was located on the ground surface during this survey, and nine shovel tests were excavated in a cruciform pattern centering on

the location of the find. These shovel tests produced no other artifacts. The isolated point was given a site number because of the rarity of recovering Early Archaic points in this area of South Carolina. Admittedly, little information can be obtained from an isolated point, but the recordation of such points in the Piedmont area may help in our understanding of Early Archaic land use. It is unlikely that this site will produce further data sets, and is therefore recommended as not eligible for inclusion on the National Register. No further management work is recommended.

Site 38AN256 is a small lithic scatter located 800 feet west of Sexton Gin Road on a dirt road surrounded by mixed hardwoods at the edge of the survey corridor (Figure 31). The site covers a 40 foot by 25 foot area, and was located during a pedestrian survey of the road. The area was surface collected and shovel tested in a cruciform pattern, with only a quartz flake and biface recovered from the surface and no positive shovel tests. The site covers an area that measures 35 feet by 20 feet.

The site's central UTM coordinates are N3802140 E348210. The elevation is 710 feet AMSL, approximately 40 feet higher than the nearest water source, a finger of Wilson's Creek located 1500 feet to the west of the site.

Site 38AN256 is located on Appling sandy loam with 2 to 6% slopes, which generally consists of an eight -inch A horizon of brown (10YR5/3) sandy loam overlying an additional three inches of yellowish

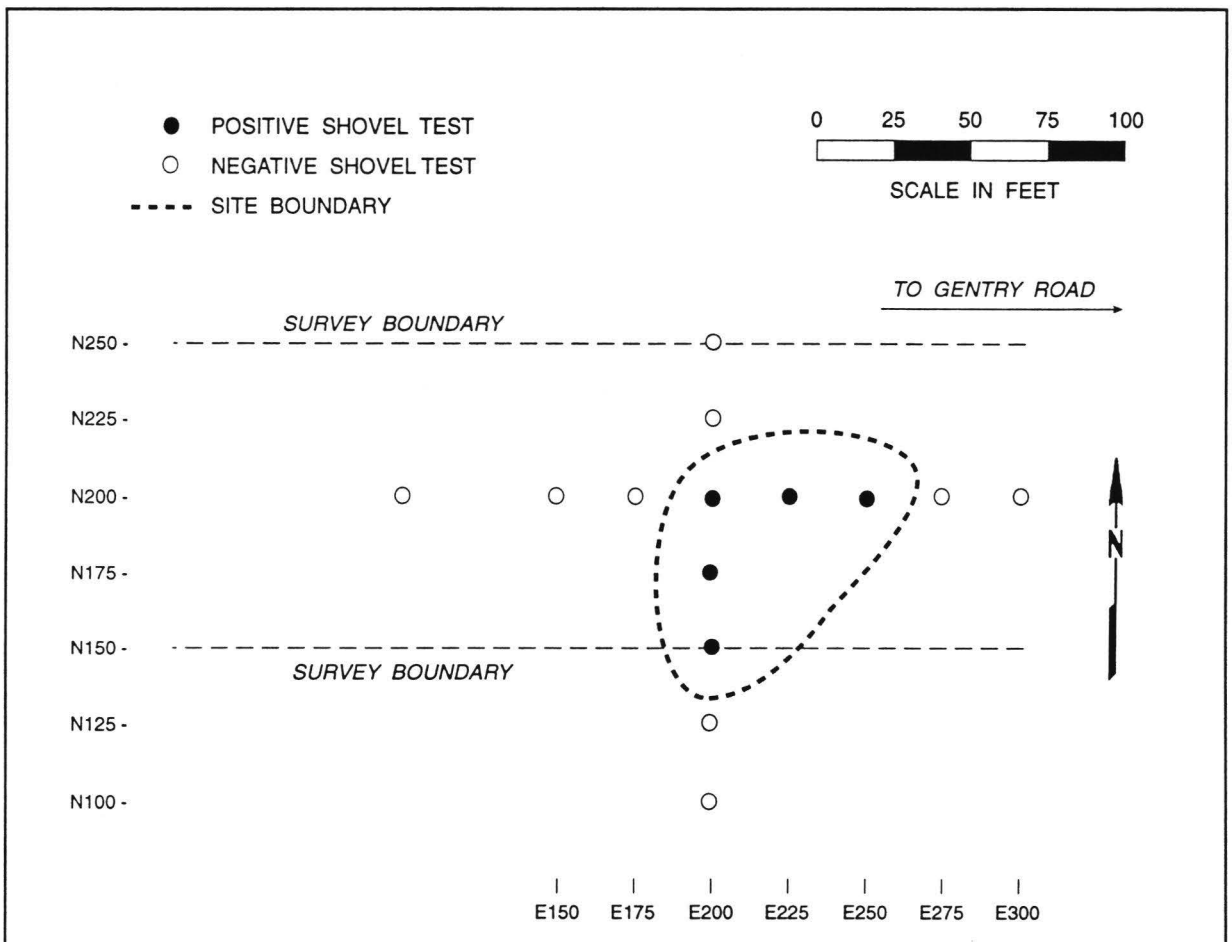

Figure 28. Map of site 38AN253.

Figure 29. View of site 38AN254 eroding out of dirt road embankment.

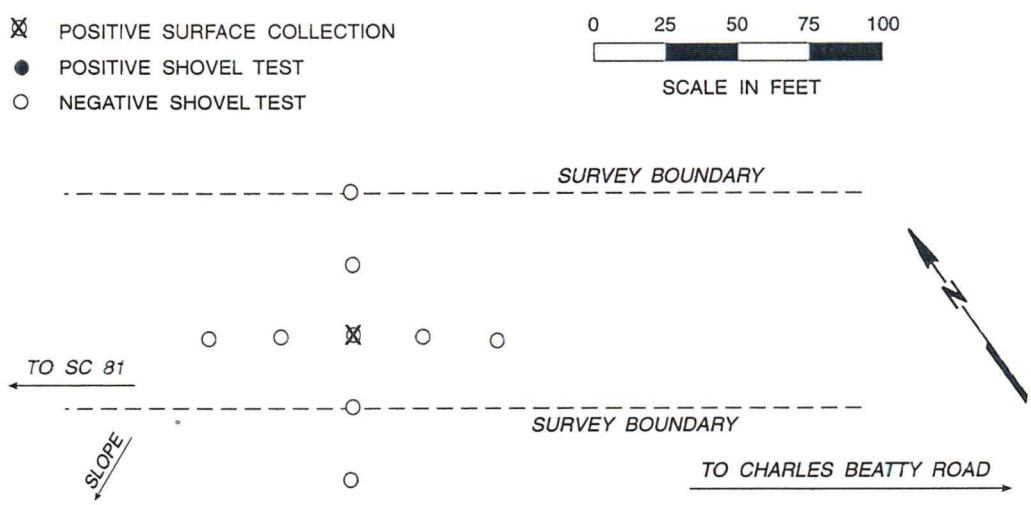

Figure 30. Map of site 38AN255.

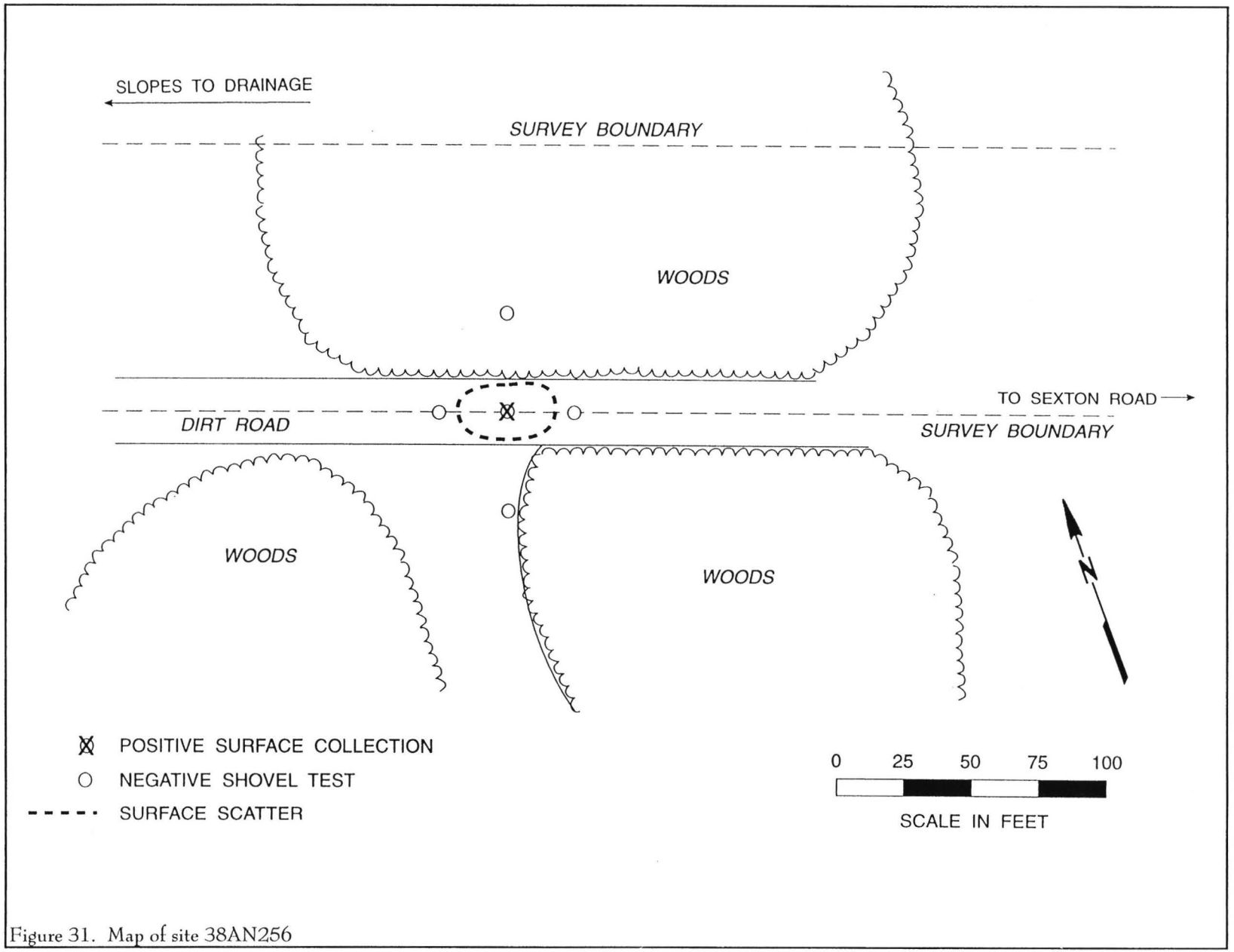

Figure 31. Map of site 38AN256

brown (10YR5/4) sandy loam. The B horizon occurs at 11 inches below the surface and consists of a strong brown (7.5YR5/6) clay and a yellowish red (5YR5/6) clay. Shovel testing in the area indicates that the soils are severely eroded in the road bed, with the B horizon visible at the surface. Shovel testing in the wooded area revealed only slight erosion to the A horizon.

The data sets present at the site include only two non-diagnostic quartz lithics. These artifacts do not permit a discussion of significant research questions. In addition, the location of the site and the eroded soils at the site suggest that the site will not produce data sets necessary to address significant research questions.

As a result, site 38AN256 is recommended as not eligible for the National Register of Historic Places and no further management work is recommended.

Site **38AN257** is a small lithic scatter located on the surface of an eroded ridge that has been logged, bulldozed, and recently chisel planted with pines (Figure 32). The central UTM coordinates are N3802120 E349580 and the elevation is 720 feet AMSL. The nearest water source, a finger of Jordan Creek, is located 200 feet south of the site and has an elevation of 680 feet AMSL. A quartz biface was located during pedestrian survey of the area and shovel testing in a cruciform pattern and additional surface collecting produced three additional quartz flakes at the surface of the site, which covered an area measuring 75 feet by 50 feet. No artifacts were recovered from the shovel tests.

The shovel test soils belong to the Cecil sandy loam series. These soils were severely eroded, with the B horizon, a red (2.5YR4/6) clay, visible at the ground surface. Normally, Cecil sandy loam has an A horizon of brown (19YR4/3) from the surface to six inches below the surface, overlying the red clay (Herren 1979:30).

The small data sets recovered from the site, including four non-diagnostic quartz lithics, do not permit a discussion of significant research question. It is also unlikely that the site will produce data sets necessary to formulate such questions, based on the severe erosion of the area. For these reasons, site 38AN257 is recommended as not eligible for inclusion on the National Register, and no further management work is recommended.

Site **38AN258** is another lithic scatter located approximately 1600 feet southwest from 38AN257, on the southern side of the drainage that runs through the field. As mentioned above, the area has been logged, bulldozed, and chisel planted in pines, resulting in the severe erosion of soils in this area.

The site is located on a terrace between slight ridges, 400 feet east of Sam Lyum Road and 1500 feet west of a finger of Jordan Creek. The site's elevation is 720 feet. The central UTM coordinates are N3801940 E349240.

Site 38AN258, situated just north of the survey corridor (Figure 33), was located during a pedestrian survey of the area. The area was surface collected, and nine shovel tests, centered in the highest concentration of surface artifacts and extending into a cruciform pattern, were excavated. One quartz core and 16 quartz flakes were surface collected, and appear to be confined to the terrace. One positive shovel test produced a single quartz flake.

The site is located on Cecil sandy loam. Shovel tests revealed erosion of the A horizon by more than four inches in some tests. In general, Cecil sandy loam has an A horizon of brown (10YR4/3) sandy loam from the surface to six inches below the surface, overlying a red (2.5YR4/6) clay B horizon. The erosion is most likely due to the recent planting activity.

The data sets recovered from the site include a total of 18 non-diagnostic quartz lithics. The site is very superficial, with only one artifact recovered from subsurface testing. In addition, the soils have been eroded and damaged. It is unlikely that the site will produce additional data sets necessary to address significant research questions. For these reasons, the site is recommended as not eligible for inclusion on the National Register of Historic Places and no further

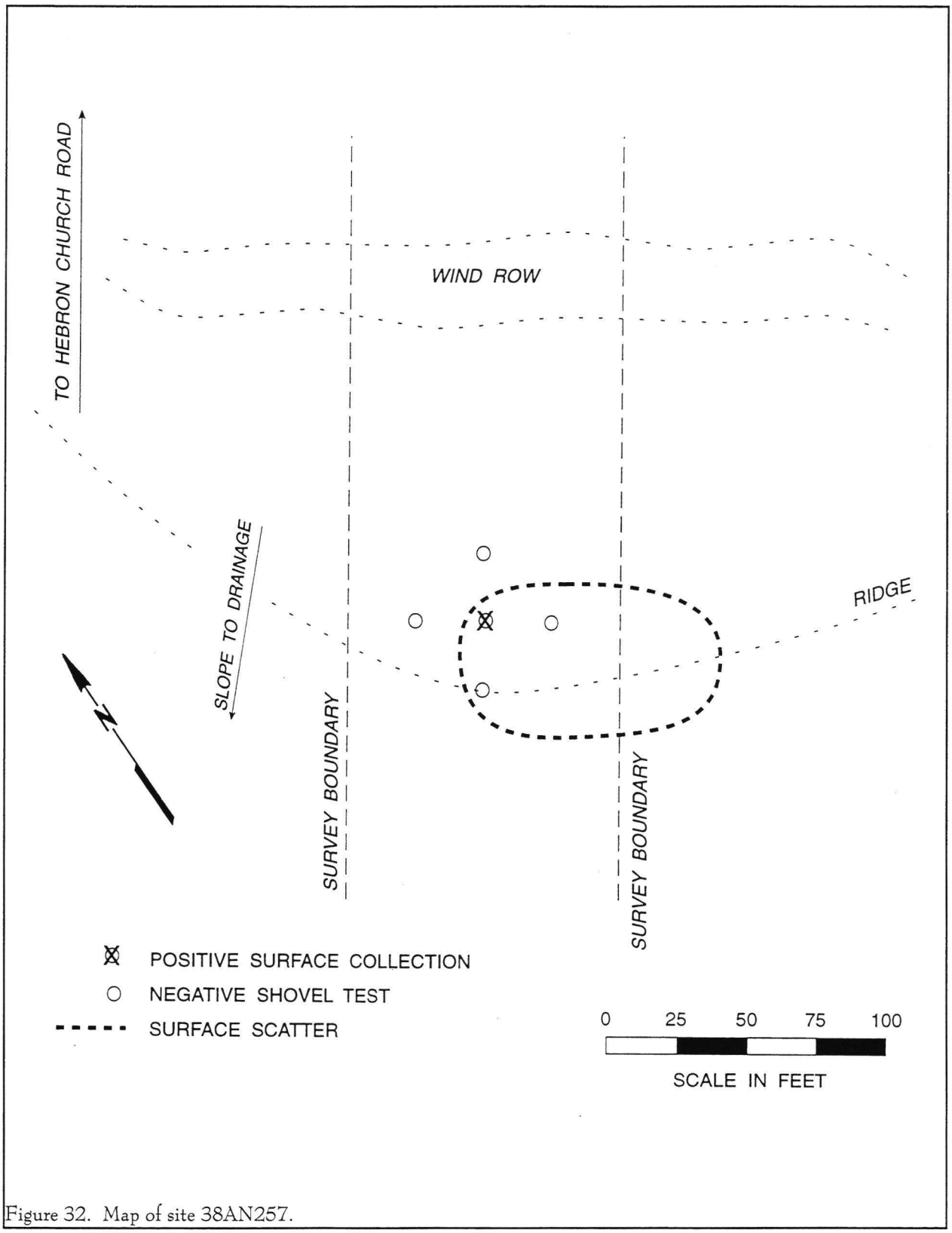

Figure 32. Map of site 38AN257.

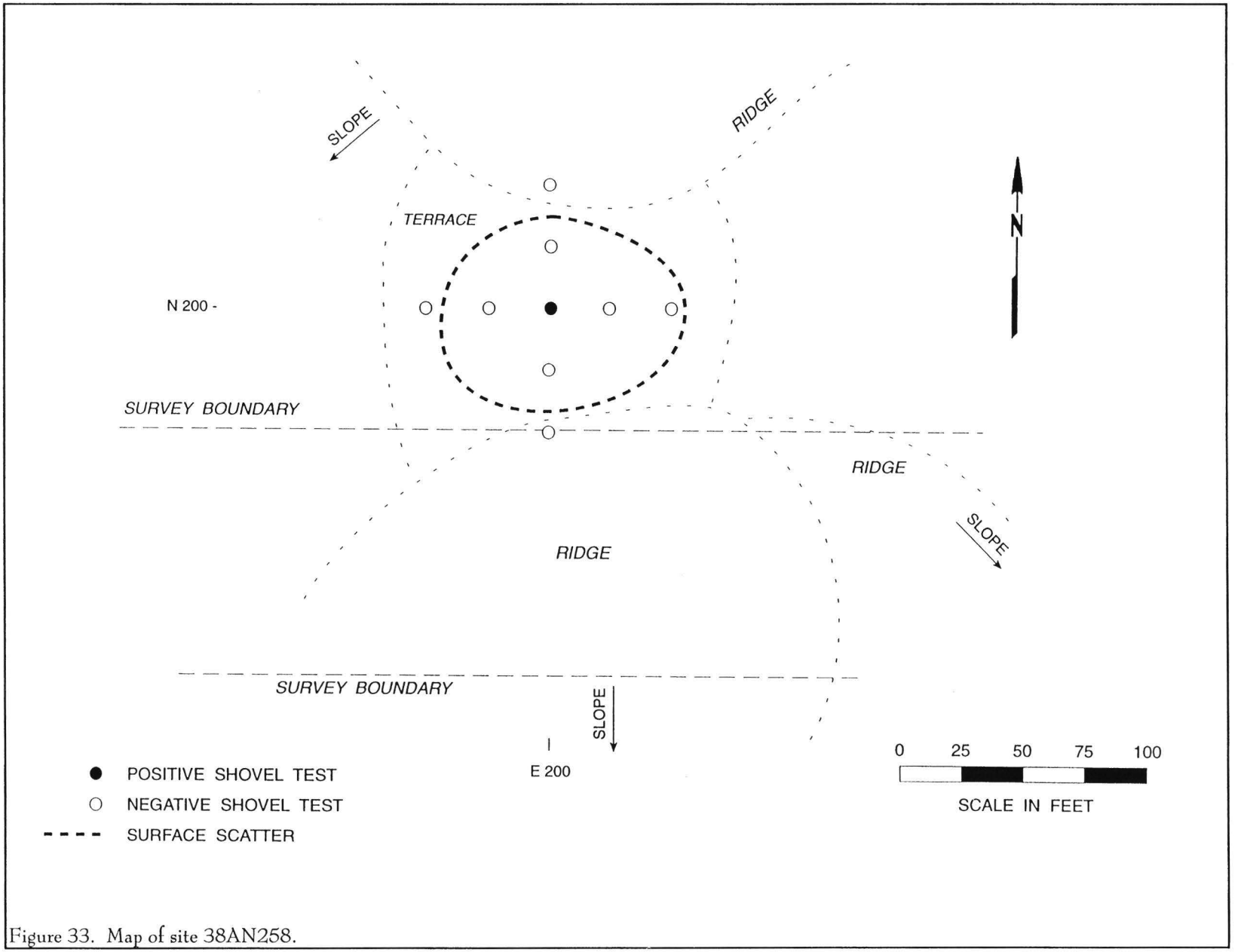

Figure 33. Map of site 38AN258.

management work is suggested.

Site 38AN259 is a historic site that represents the remains of a tenant house. This site is also located in the same field of recently planted pines as the previous two sites, on the side of a ridge. This site has also been subject to erosion and damage by planting procedures, evidenced by the presence of timbers and roofing in a wind row adjacent to the site (Figure 34). Site 38AN259 is located 40 feet south of Hebron Church Road and 1000 feet north of a finger of Jordan Creek. The central UTM coordinates are N3802160 E249600. The elevation is 720 feet AMSL. The site covers an area that measures 175 feet by 200 feet.

The site was located during a pedestrian survey of the area, right outside of the survey boundary. A number of artifacts were noted at the surface, and a general surface collection was undertaken, producing 30 artifacts. Shovel testing in a cruciform pattern began at the heaviest surface concentration of artifacts, and a total of 15 shovel tests were excavated. Of these, seven were positive and produced 20 artifacts. These artifacts, listed in Table 1, are consistent with those artifacts common to early twentieth century tenant houses. The mean ceramic date is 1867, shown in Table 2.

As mentioned above, the soils at site 38AN259 have been severely eroded, though not as badly as the soils at sites 38AN258 and 38AN257. These soils, also Cecil sandy loam, exhibited at least two inches of A horizon brown (10YR4/3) sandy loam, over a B horizon of red (2.5 YR4/6) clay, although in some cases, the A horizon extended to the expected six inches.

The data sets present at site 38AN259 include glass and ceramic artifacts. There are a number of significant research questions that tenant house sites can address. For example, tenant house sites may address questions regarding the social and economic status of occupants, consumer choice, and duration of occupation. However, in order to answer research questions such as these, a site must produce a greater number of artifacts, artifacts that provide precise chronological control, features, and food refuse remains. It is unlikely that site 38AN259 will produce such artifacts or features, mainly due to the extensive bulldozing, plowing, and planting damage it has undergone. In addition, the soils at the site have been eroded, suggesting that the site itself has eroded down the ridge sides.

For these reasons, site 38AN259 is recommended as not eligible for inclusion on the National Register of Historic Places. No further management work is recommended.

Site 38AN260 is a small lithic scatter located along the survey corridor on a slight ridge that slopes down to a finger of Governors Creek, approximately 60 feet to the southeast (Figure 35). The central UTM coordinates for the site are N3802680 E352510. The elevation is 700 feet AMSL, while that of the creek is 650 feet AMSL. The site covers an area that measures 80 feet by 80 feet.

The area, recently planted in pines, had excellent ground visibility. The site was located on the basis of pedestrian survey, and was shovel tested and surface collected. Shovel tests were centered in the area with the greatest concentration of surface artifacts and extended in a cruciform pattern. No subsurface artifacts were recovered from these shovel tests. A total of fourteen artifacts were recovered from the surface, including a quartz biface, two quartz shatter, and 11 quartz flakes.

The shovel tests soils belong to the Cecil sandy loam series. Similar to other sites, these soils have been severely eroded, most likely due to repeated bulldozing and planting. In general, Cecil sandy loam has an A horizon of brown (10YR4/3) sandy loam from the surface to six inches below the surface, overlying a red (2.5YR4/6) clay B horizon. At site 38AN260, the B horizon was visible at the surface, and no A horizon soils were present in the shovel tests.

The data sets present at the site include a total of 14 non-diagnostic quartz lithics. The lack of dateable artifacts, subsurface artifacts, or features makes it difficult to suggest significant research

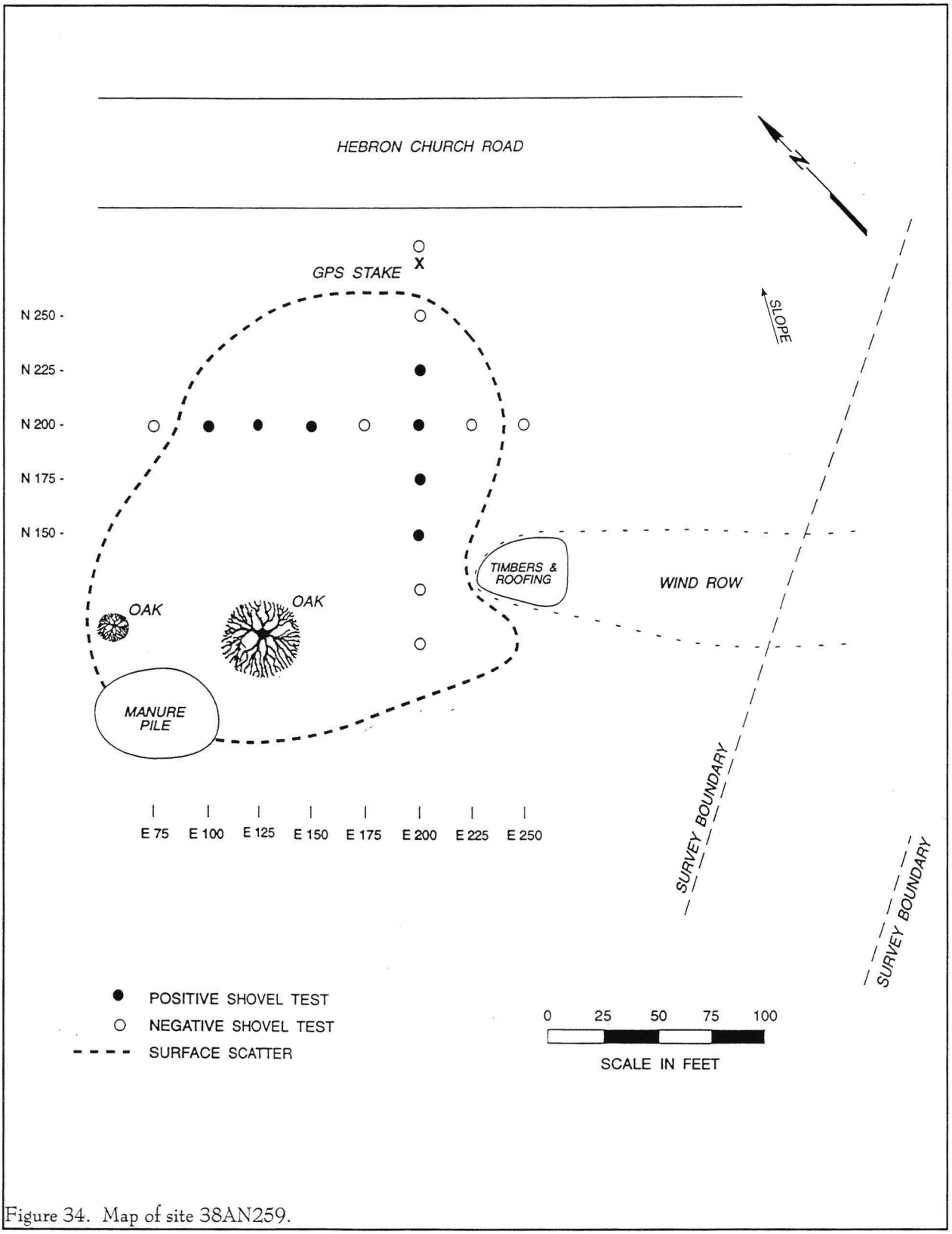

Figure 34. Map of site 38AN259.

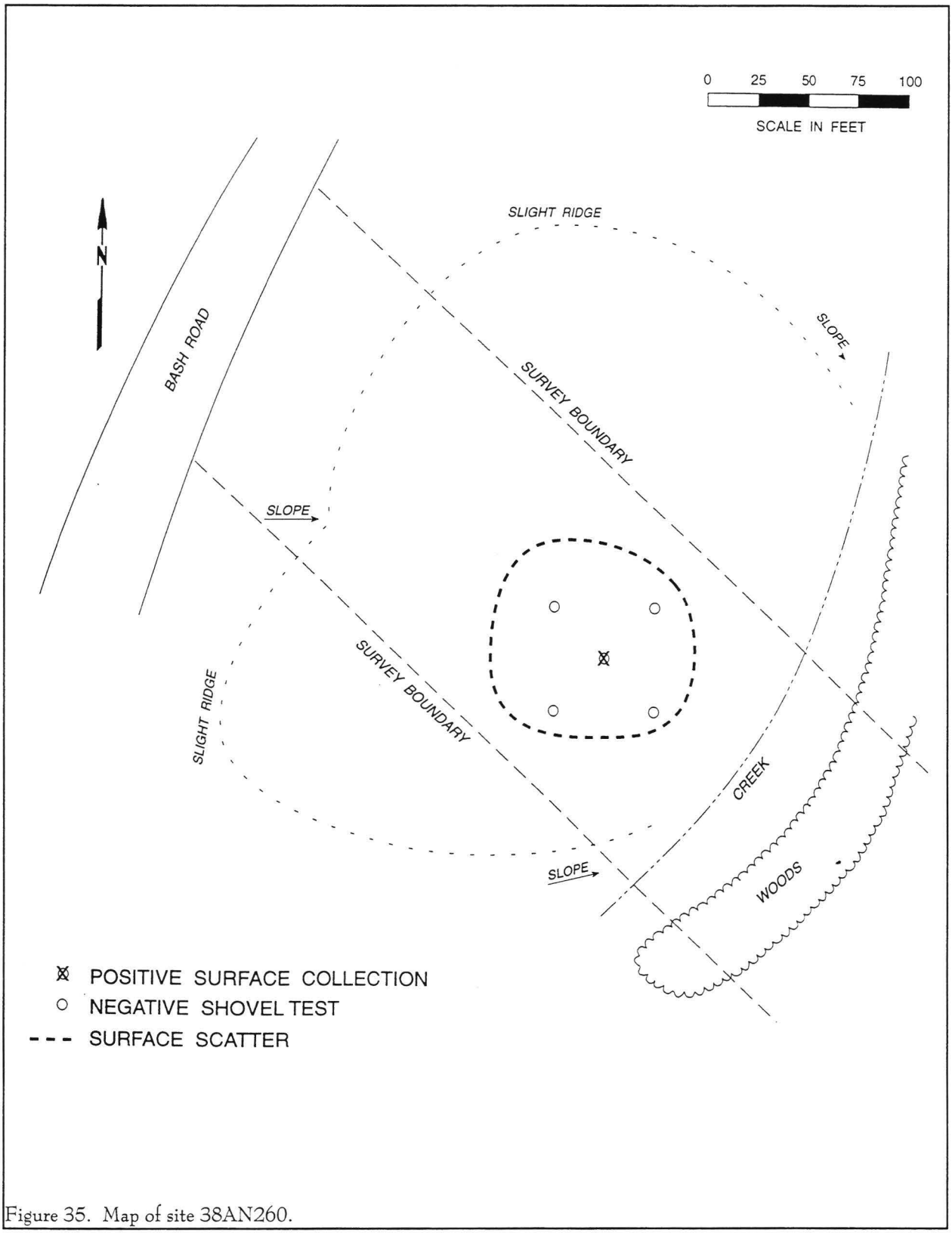

Figure 35. Map of site 38AN260.

questions that the site may be able to address. Moreover, the sparsity of the artifacts, the superficial nature of the site, and erosional damage to the site indicate that t it is unlikely that site 38AN260 will produce data sets necessary to explore research questions.

For these reasons, 38AN260 is recommended as not eligible for inclusion on the National Register of Historic Places. No further management work is recommended.

Site **38AN261** is a small lithic scatter located approximately 200 feet south of the survey corridor (Figure 36), 1200 feet southeast of site 38AN260, and 400 feet south of a finger of Governors Creek. This area has also recently been bulldozed and planted in pines, resulting in severe erosion of the soils and excellent ground visibility. This site was noted during pedestrian survey of the survey tract on the sloping side of a ridge. The central UTM coordinates are N3802540 E352840. The elevation is 700 feet AMSL.

No shovel testing was undertaken at the site because it is located outside of the survey corridor. Six quartz flakes and a chert flake were surface collected from the site. The site covers an area that measures125 feet by 120 feet. Site 38AN261 is also located on Cecil sandy loam. Although no shovel tests were excavated, the soil's erosion is evident due to the presence of the B horizon red (2.5YR4/6) clay at the ground surface. This site most likely represents slope wash from the adjacent ridge.

The data sets at 38AN261 include seven non-diagnostic lithic artifacts that are most likely a product of erosion from the adjacent ridge, as indicated by the soils. It is unlikely that this site will produce artifacts with the integrity necessary to address significant research questions. For these reasons, site 38AN261 is recommended as not eligible for inclusion on the National Register of Historic Places. No further management work is recommended.

Site **38AB824** is a small lithic scatter located approximately 5000 feet northeast of SC Highway 201 on the side of a ridge sloping towards a finger of Little River. The scatter was located on the western survey corridor near Duke power line tower 74 in a cleared area with no vegetation (Figure 37). The central UTM coordinates are N3801900 E363880. The elevation is 580 feet AMSL, approximately 40 feet higher than the elevation at the finger of Little River.

This site was located based on a pedestrian survey of the survey corridor. A shovel test was excavated at the area of the first surface collection and four additional tests were excavated in a cruciform pattern from this tests. No subsurface artifacts were produced from this testing. The surface collection produced a total of three artifacts, including a quartz flake, a quartz shatter, and a chert flake. The site covers an area measuring 50 feet by 50 feet.

The soils at site 38AB824 belong to the Cecil sandy loam series. The shovel tests and ground surface show evidence of severe erosion, with the B horizon red (2.5YR4/6) clay exposed at the ground surface, with no A horizon soils in the shovel tests.

The data sets at 38AB824 include only three non-diagnostic quartz flakes. It is unlikely, given the erosion of the soils, that this site will produce the dateable artifacts and features necessary to address significant research questions. For this reason, site 38AB824 is recommended as not eligible for inclusion on the National Register of Historic Places. No further management work is recommended.

Site **38AB825** is another small lithic scatter located on the slope of a ridge in a cleared area outside of the survey corridor near a Duke power line tower (Figure 38). The site is situated 800 feet south of a finger of Little River and 6,500 feet northeast of SC Highway 201.

The central UTM coordinates are N3801780 E364060. The elevation is 650 feet AMSL, 60 feet higher than the elevation at the finger of Little River. The site was noted while pedestrian surveying the cleared area underneath the power line adjacent to the survey corridor. Shovel tests were placed at the first surface collection and extended in a cruciform pattern

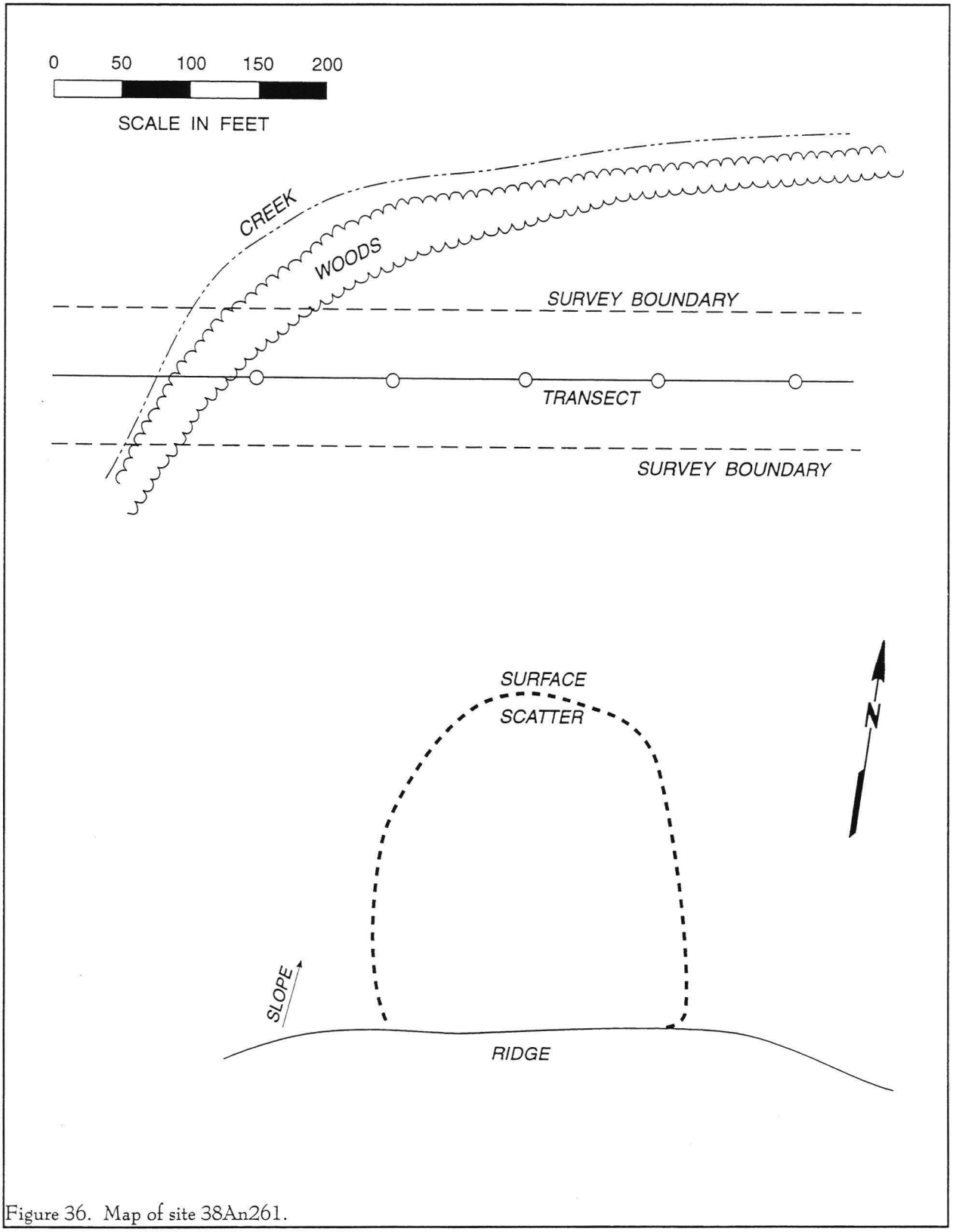

Figure 36. Map of site 38An261.

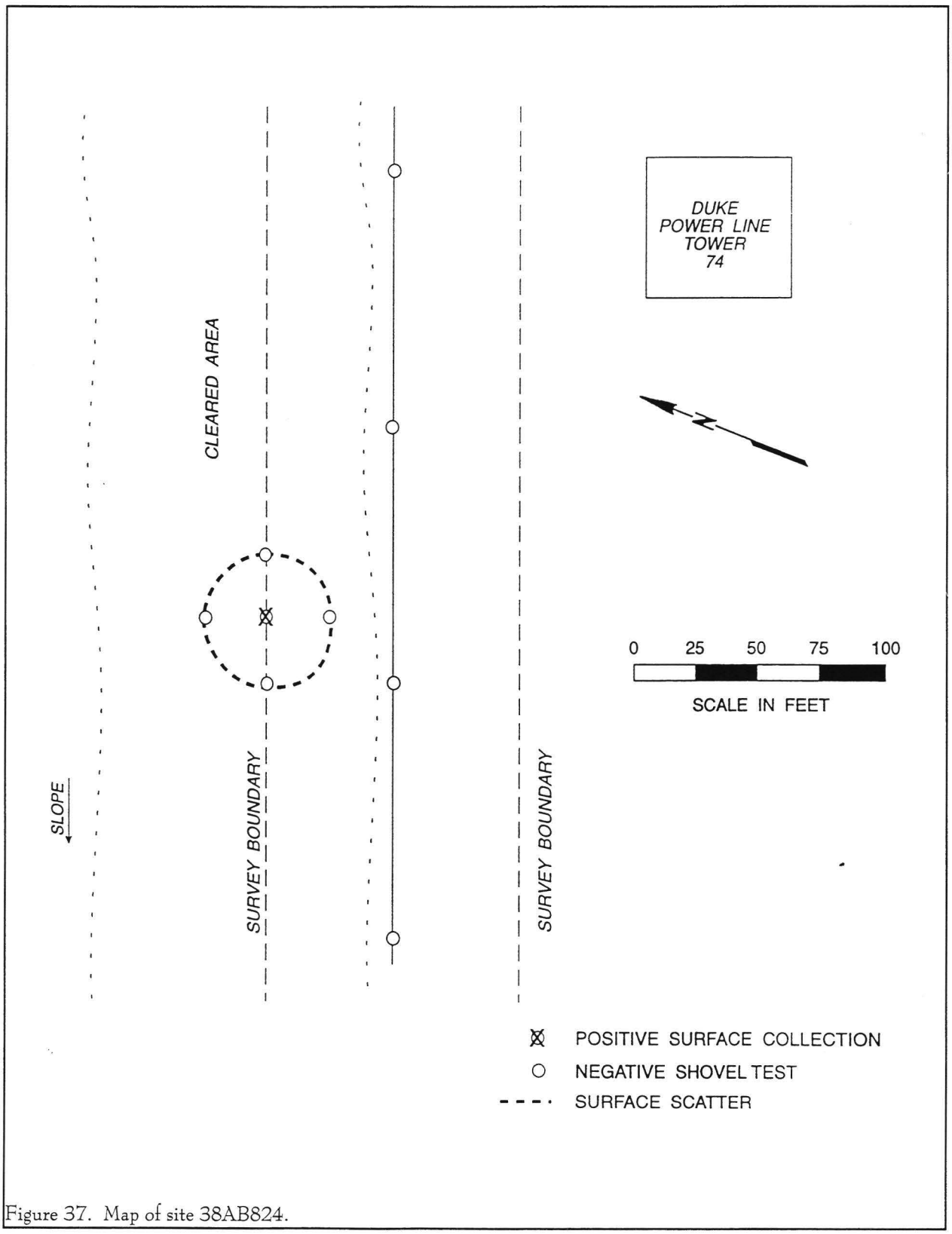

Figure 37. Map of site 38AB824.

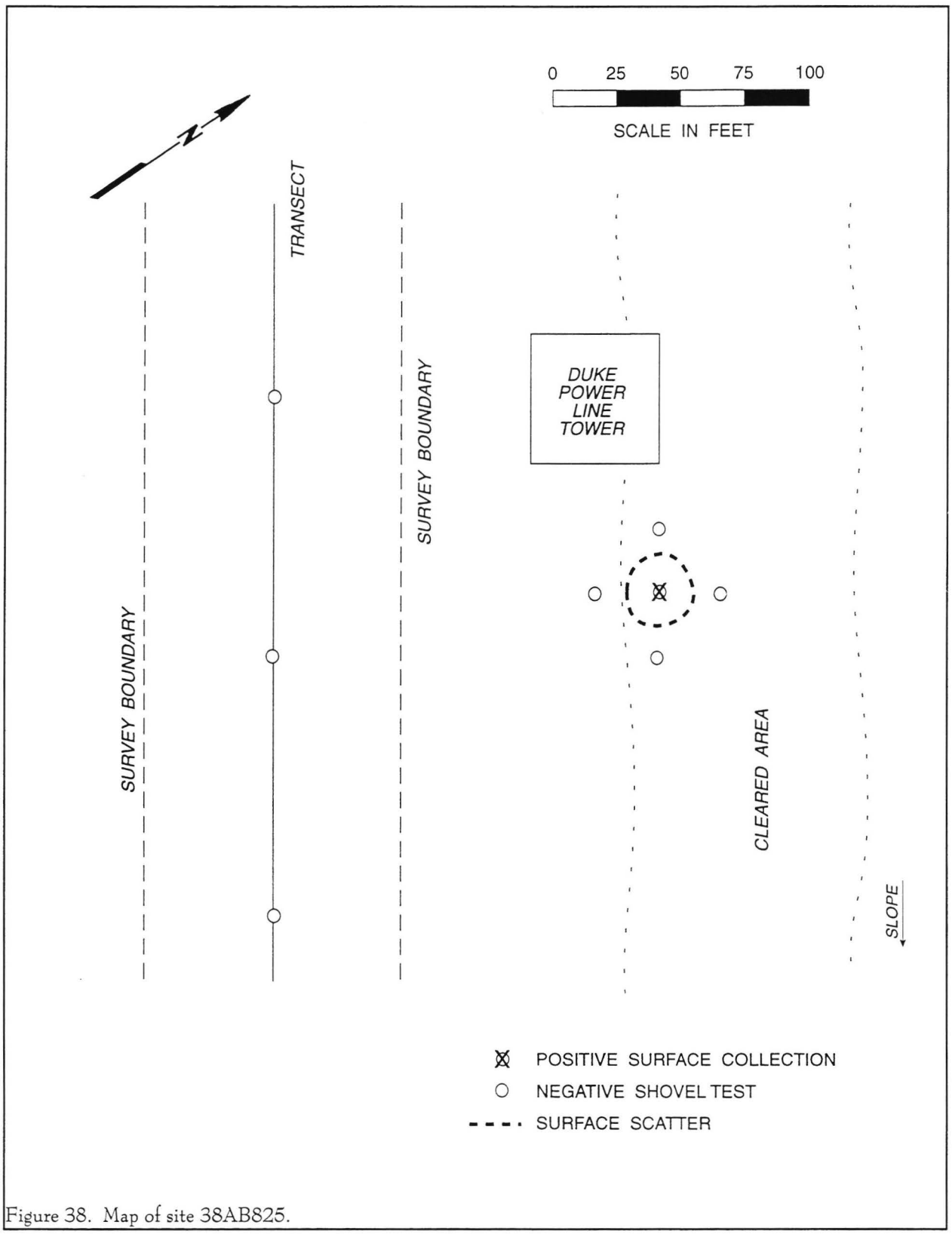

Figure 38. Map of site 38AB825.

from this point. No subsurface artifacts were recovered from shovel testing. The surface collection produced a quartz flake and a quart biface in an area measuring 25 feet by 25 feet.

The soils at the site belong to the Madison sandy loam soil series. In general Madison soils consist of five inches of a brown (10YR5/3) sandy loam A horizon over a B horizon red (2.5YR4/8) clay (Herren 1980:40). When compared to this general soil description, the soils at the site have obviously eroded as the B horizon is visible at the ground surface and no A horizon soils are present in the shovel tests.

The data sets at site 38AB825 include only two non-diagnostic lithic artifacts. It is unlikely that this site will produce dateable artifacts or features necessary to address significant research questions. In addition, the soils are very eroded, suggesting that the site is not intact. For these reasons, 38AB825 is recommended as not eligible for inclusion on the National Register of Historic Places. No further management work is recommended.

Site 38AB826 is a small lithic scatter also located near a Duke power line tower in a cleared, plowed area approximately 100 feet northeast of the survey corridor. The site is situated on a ridge side sloping to a finger of Little River, approximately 1500 feet to the south (Figure 39). The elevation of the site is 620 feet AMSL, 40 feet higher than the nearby drainage. The central UTM coordinates are N3801700 E364380.

The site was located during a pedestrian survey of the cleared area. The area was surface collected, producing a quartz shatter and three quartz flakes. Based on this surface collection, we determined that the site covered an area measuring 100 feet by 75 feet.

The site is located on Cecil sandy loam. Although the site was not shovel tested due to its location outside of the survey corridor and time constraints, the soil's erosion was evident as the red (2.5YR4/6) B horizon was evident at the ground surface. Typically, Cecil sandy loam has a six inch A horizon of brown (10YR4/3) sandy loam.

The only data sets recovered from the site include four non-diagnostic lithics. This small number of artifacts does not enable significant research questions to be developed. In addition , the location of the site in a plowed and cleared area, and the eroded soils at the site suggest that the site will not produce data sets necessary to address significant research questions. For these reasons, site 38AB826 is recommended as not eligible for inclusion on the National Register of Historic Places. No further management work is recommended.

Site 38AB827 is a twentieth century site with subsurface remains, a standing barn, and a collapsed house located adjacent to road S-4-184 (Figure 40). Grays Creek is located 100 feet to the west of the site. The central UTM coordinates are N3796420 E376820.

The site was noted during shovel testing of the survey corridor, which crosses the northern section of the site. No positive shovel tests were encountered during shovel testing of the center line of the survey corridor, although two positive shovel tests were recorded around the perimeter of the collapsing house (Figure 41).

The site has recently been logged, resulting in two large piles of deadfall to the east and west of the house. A standing barn and rusted car are located 200 feet to the southwest of the house (Figure 42). The house has machine hewn planks, a tin roof, wire nails, stone piers, a brick fireplace, and mortar and cinder block porch piers. As mentioned above, shovel testing around the house produced two positive shovel tests and seven artifacts. An aqua glass fragment, a clear glass fragment, and a whiteware fragment were recovered from the shovel test placed 60 feet north of the house. Sixty feet west of the house, three clear glass fragments, and a whiteware fragment were recovered. Two large scatters of artifacts were noted on the surface, one west of the house, and one east of the barn. A general collection was made at the scatter west of the house, producing five whiteware fragments, a molded whiteware fragment, a porcelain fragment, an aqua Mason jar fragment, and a blue glass bead. No collection was made at the scatter east of the barn. The

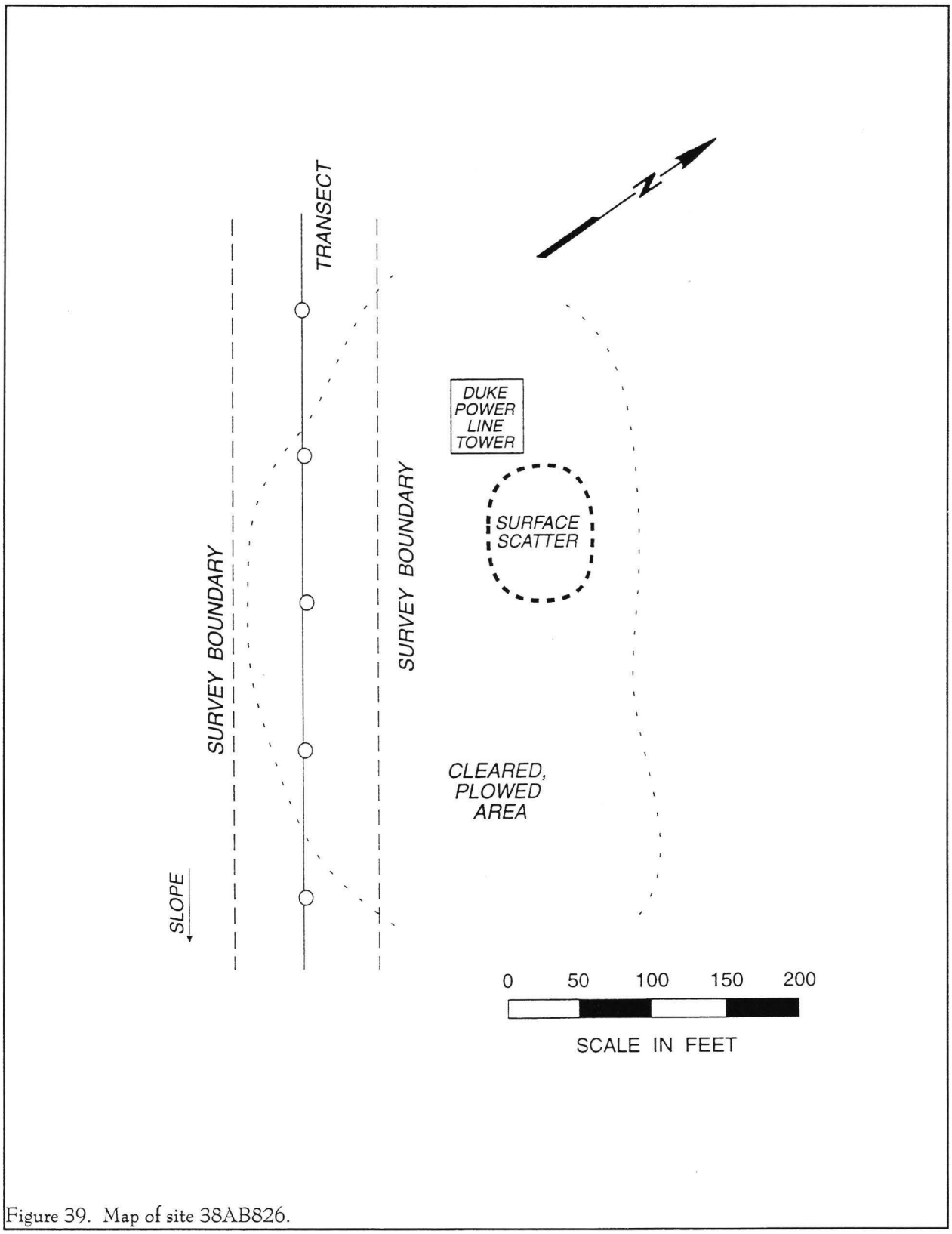

Figure 39. Map of site 38AB826.

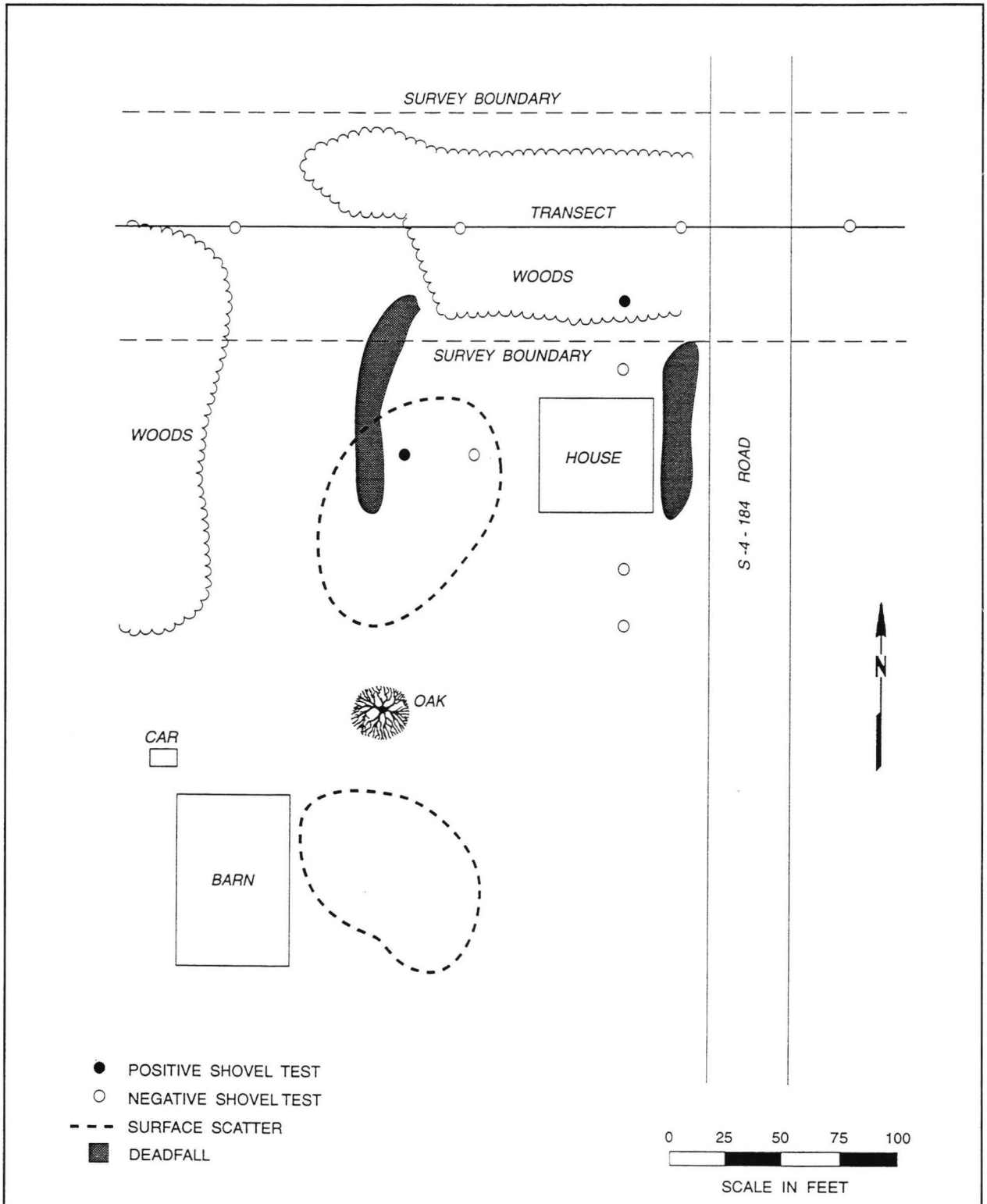

Figure 40. Map of site 38AB827.

Figure 41. View of house at 38AB827.

Figure 42. View of barn at 38AB827.

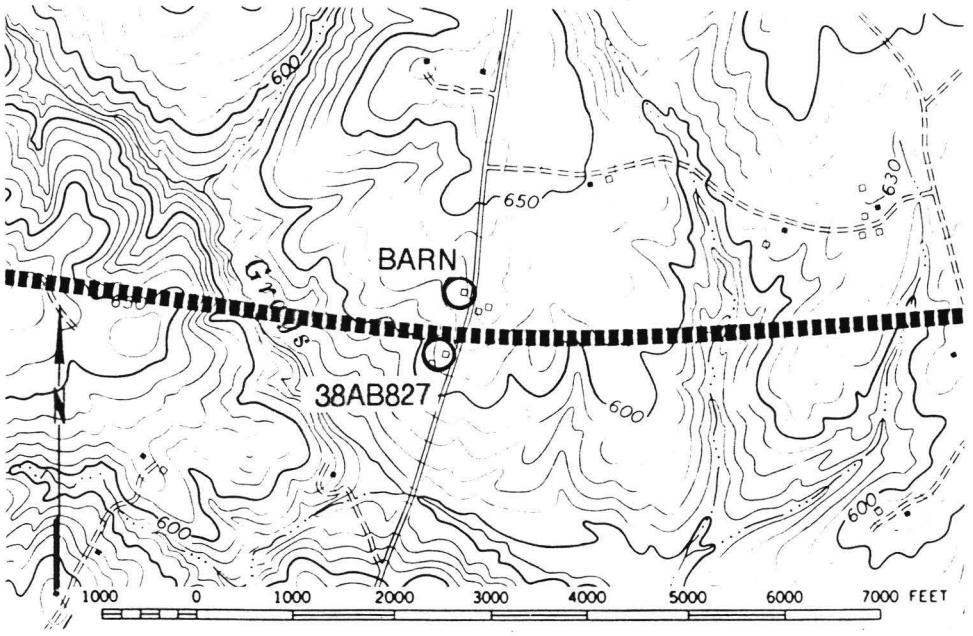

Figure 43. Location of 38AB827, survey corridor,and structure north of corridor (base map is Shoals Junction 1971).

barn is constructed of machine hewn planks and wire nails, with a tin roof.

The artifacts suggest that the site dates to the first half of the twentieth century. The structures are also shown on the 1971 Shoals Junction USGS topographic quad map. Although the site has been damaged through recent logging, the structures indicate that at least some of the site is intact.

The site is located on Cataula sandy loam. Generally, this soil has an A horizon of six inches of brown (10YR5/3) sandy loam over a B horizon of red (2.5YR5/8) clay. The shovel tests had between two to six inches of A horizon soils, indicating that the site may be intact.

Although the data sets collected from the site are small and limited to glass and ceramic artifacts, the standing barn and intact soils suggest that the site has integrity. If this site does in fact posses integrity, it will be able to address a number of significant research questions focusing on twentieth century farm site spatial patterning, function, and duration, the social and economic status of farmers in the Piedmont area during the early twentieth century, and consumer choice.

As a result of the site's possible integrity and potential to address significant research questions, we recommend site 38AB827 as potentially eligible for inclusion on the National Register of Historic Places. If the site can be avoided by construction activities, essentially protecting the site through green spacing, then no additional investigations are recommended at this time. However, if preservation is not possible, the site should be tested at close intervals to establish site boundaries and excavations should be undertaken to further address the site's integrity and possibility to answer research questions. This recommended level of testing would clarify eligibility and allow a final determination. It should be noted that simply moving t he power line to the north will also impact a standing structure located directly to the north of the existing power line (Figure 43).

Identified Historic Resources

Historic Resource 1 is a standing house and barn located 600 feet east of Gentry Road and 200 feet south of the proposed power line (Figure 44). These structures, which are currently occupied, are located in a rural residential community near the town of Iva.

Figure 44. View of Historic Resource 1.

Figure 45. View of Historic Resource 2.

Table 1.
Artifacts Recovered from 38AN259

		Whiteware					Glass					
Prov.	Plain	Decal	TP	Tinted	Pearlware	Yelloware	EW	Brown	Clear	Blue	Aqua	Milk
Surface	9	3	2	1	1	1	1		4	1	1	6
N150E200									1			
N175E200	1								1			
N200E100					2							
N200E125									3			
N200E150		1							2			
N200E200							1	2	5			
N225E200									1			
Total	10	4	2	1	3	1	2	2	17	1	1	6

The central UTM coordinates are N3802100 E344580. Shovel testing in the survey corridor near the structures were negative. These structures are shown on the USGS Iva topographic quadrangle (see Figure 24).

The standing house is a rectangular one story building with a rear kitchen that may have been added on, and a less than full facade porch. The roof is front to rear gabled and is constructed of red metal. The house is has horizontal framing, single metal windows, a single front door, and no visible chimney. The porch has treated wood posts. The foundations were not visible. The barn is situated to the southeast of the house and appears to be constructed of horizontal wood siding with a tin roof.

These structures will not be impacted by the current proposed power line. These structures do not appear to be eligible for inclusion on the National Register of Historic Places, and no further management work is recommended..

Historic Resource 2 (Figure 45) is an abandoned standing house located approximately 2000 feet east of SC Highway 81, and 200 feet south of the proposed power line. It is situated at the end of a dirt road that runs from SC Highway 81 and appears to have been moved to this location. The central UTM coordinates are N3802540E345560.

The structure actually consists of two independent rectangular houses butted together, with the windows between the two houses aligned, but no doorway connecting the interiors. The structure rests on cinder blocks and has no porch or visible chimney. Both are constructed of horizontal wood siding and machine nails. The through gabled roof consists of asphalt shingles. Electrical wiring was not part of the original house construction, but has been added. The exterior door s are paneled, and one door has an agate door knob. The southernmost building of the structure has a stainless steel vent hood and wallboard in the interior, while the northernmost building has wood paneling.

Under the current proposed power line corridor, this structures will not be impacted. The

Table 2.
Mean Ceramic Date for 38AN259

Ceramic	fi	xi	fi x xi
Whiteware, undec	10	1860	18600
Whiteware, tp	2	1851	3702
Whiteware, tinted	1	1941	1941
Whiteware, decal	4	1926	7704
Pearlware, undec	3	1805	5415
Yelloware	1	1853	1853
	21		39215

39,215 ÷21=1867.38

structure is not recommended as eligible for the National Register of Historic Places, and no further management work is recommended.

SUMMARY AND RECOMMENDATIONS

The Santee Cooper transmission line survey was investigated from the proposed Rainey Plant site to the Greenwood County SW substation. This line crosses Anderson, Abbeville, and Greenwood counties. The survey was conducted using a single line of shovel tests, placed at 100 feet intervals within the 85-100 feet wide, 30 mile long corridor.

The survey corridor is located in the Piedmont. The topography is characterized by gently sloping to moderately steep hills. The survey corridor crossed a variety of natural and man-made environments, including pasture land, agricultural fields, planted pine forests, mixed pine/hardwood forests, and wetlands. Little River, Wilson Creek, Jordan Creek, Chicksaw Creek and a number of small intermittent streams were encountered along the course of the survey corridor.

As a result of the archaeological survey of the Rainey to Greenwood County SW substation 230kV transmission line, fourteen sites and two historic resources were discovered. Of these sites and resources, only one, site 38AB827 is recommended as potentially eligible for inclusion on the National Register of Historic Places. The remainder are not recommended as eligible for inclusion on the National Register of Historic Places and no further management work is recommended for these other sites and resources.

Site 38ABA827 is located adjacent to secondary road 184 in Abbeville County. The site contains a collapsing house, a standing barn, and subsurface remains. It is likely that this site has the potential to address significant research questions concerning farming practices, consumer choice, and economic status in rural South Carolina during the early twentieth century. This site, if determined eligible, would be recommended under Criterion D, as an archaeological resource that has the potential to yield information important to history.

If possible, this site should be avoided by all construction and ground disturbing activities, including the use of heavy machinery near the site area. This site can be avoided if no poles are located within the boundaries of the site and all movement near the site is limited to that which will not cause damage to the ground surface, such as using vehicles with rubber tires only during dry weather. The contractor should be notified that this are is off-limits for staging area, repeated access, or parking.

It should also be noted that simply moving the line to the north of the existing Duke power line will impact another standing structure which has not been assessed. If the site is to be impacted, then it must be tested to further determine its eligibility.

It is important that Santee Cooper place this site location on their permanent routing maps to ensure that the site is not subsequently damaged by transmission line maintenance. Maintenance should follow the same restrictions as construction, with access only during dry weather and only be vehicles with rubber tires. Tracked vehicles should not be permitted on archaeological sites because of potential rutting and compaction problems. It is important to emphasize that the maintenance and repair of transmission lines must also avoid impacting the archaeological remains.

It is possible that archaeological remains may be encountered in other portions of the survey tract during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the South Carolina State Historic Preservation Office or to the client's archaeologist. No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist.

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